ACT

ACT portfolio

compatible and reliable

ACT
specialized in connectivity solutions

ACT is a leading manufacturer of connectivity solutions. ACT offers a guaranteed and constant quality, complies with international standards and European legislation. Did you know that all ACT network and fiber cabling is available directly from stock? You can get started straight away. With our solutions, you can easily create a stable network.

Why Professionals choose ACT

ACT product range and stock

At ACT we do offer a complete connectivity product range with over 1 million products in stock

- Copper Network
- Fiber Network
- Video/audio cables, extensions, converters
- Power cables
- USB cables and solutions
- Cable management

Mix and Match approach

- ACT solutions mix and match seamlessly in use with existing brands
- ACT matches and exceeds the international standards for maximum compatibility

Consistent guaranteed quality

- In house quality management
- Each time we make sure you get the same product quality
- Meet and exceed international standards and EU legislation
- ACT offers a 5 year warranty

5-year warranty

Our ACT cables come with a 5 year warranty.

ACT Custom made service

Almost anything is possible

Custom made service: Do you need a custom-made cable? For a different lenght or special connector? As a cable specialst nearly everything is possible!

ACT Custom made service consists of:

- Excellent support by an experienced specialist
- Flexibility and short lead times
- Labelling as desired
- Clear data sheets
- Excellent price/quality ratio

We will be glad to support your way to find the best conenctivity solution. For more infomation please contact us!

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ACT portfolio

COPPER   FIBER   CABLE ON REEL   VIDEO   AUDIO   USB   CABLE MANAGEMENT   POWER   DESIGN+

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Construction Product Regulation (CPR)

What is the CPR regulation?
The social importance of fire safety is increasing. People spend a large part of their time in buildings, unaware of the dangers of fire. While approximately 90 percent of all fires that break out annually take place in buildings. Ensuring quality in the use of building materials therefore becomes essential. CPR (Construction Products Regulation) is a European regulation that ensures that unambiguous requirements are set for the essential properties and performance with which construction products must comply.

What is the purpose of the CPR?
The purpose of the Construction Products Regulation (CPR) is to provide reliable information on construction products with regard to the performance of the products. This is achieved through the provision of a "common technical language" determining uniform assessment methods for the performance of construction products. Those assessment methods are drawn up in harmonised technical specifications.

This uniform technical language is to be used by:
- Manufacturers in communicating the performance of their products Member State authorities in specifying requirements
- Users (architects, engineers, constructors, etc.) in choosing which products are best suited to the construction projects they will carry out

Which cables are covered by the CPR?
The following cables are subject to CPR regulations:
- Cables intended to be used for the provision of electricity and communications in buildings and other civil engineering works and subject to fire performance requirements.
- Cables intended for the provision of electricity, communication, fire detection and alarm in buildings and other civil engineering works.

What performance characteristics of cables are covered by CPR?
The performance characteristics of cables subject to CPR are:
- Fire behaviour
- Function retention
- Release of hazardous substances during normal use, disassembly and recycling

Which fire classes apply to reaction to fire?
To describe the reaction to fire behaviour of cables, cables are classified in a Euroclassification consisting of seven fire classes and associated contribution to the fire:

The four classes in bold are relevant for European countries.
Heat emission and fire propagation are the most important criteria. Smoke development, falling burning material and acidity of flue gases are additionally classified.

Fire classes
In order to determine the correct fire classification for the application of cables in buildings, CPR cables are classified in different fire classes.

A lot of decisions have to be made while installing or updating the network. One of these decisions is to use shielded or unshielded network cables.
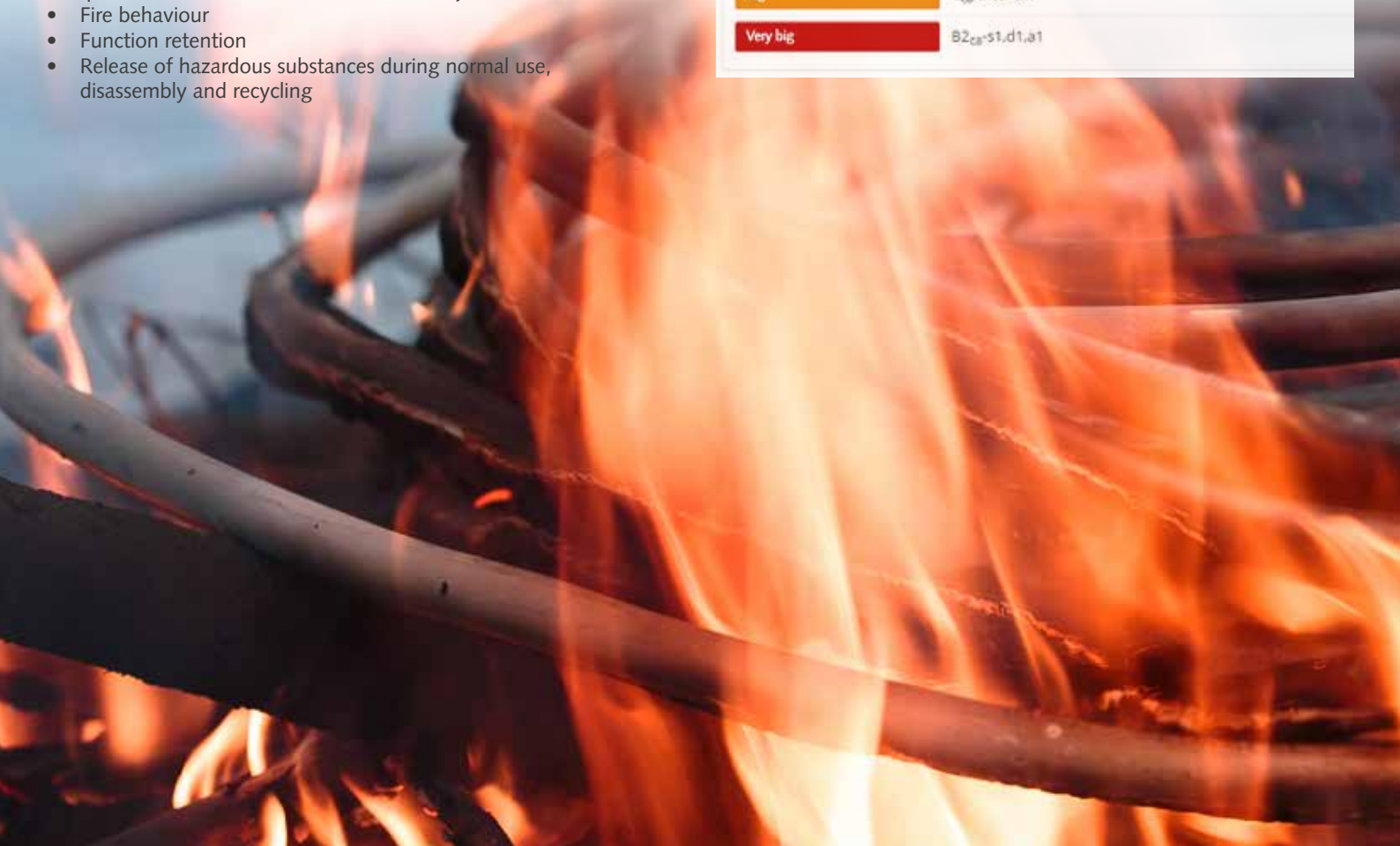
One important factor in this decision is the environment where the cables are being installed. In an environment where there is a lot of electromagnetic interference (EMI) expected, it's highly recommended to use shielded network cables as these are much more resistant to EMI.

A higher level of electromagnetic interference is expected nearby air conditioners, printers, motors and fluorescent lights. This EMI can cause data degradation which can result into lower transmission speeds and higher error rates. A normal unshielded network cable is already designed to reduce EMI up to a certain level. This is achieved by it twisted pair design.

However when you use unshielded cables in an environment where a higher level of EMI could occur, There is a high chance of data loss and lower transmissions rates.

A shielded network cable has an extra conductive layer (shield). This type of schielding can be applied around the hole cable and/or around echt individual twisted pair. This shielding protects the cable from unwanted EMI influences, ensuring a stable and well performing network connection.

Types of shielding:
- Foil Shield
- Braided shield
- Combination of foil and braided shielding

U/UTP Unshielded twisted pair

F/UTP Twisted pair cable with foil shielding

SF/UTP Twisted pair cable with foil and braded shielding

U/FTP Twisted pair cable with foil shielding for each wire pair separately

S/FTP Twisted pair cable with foil shielding for each wire pair plus additional braiding screen for all address pairs together
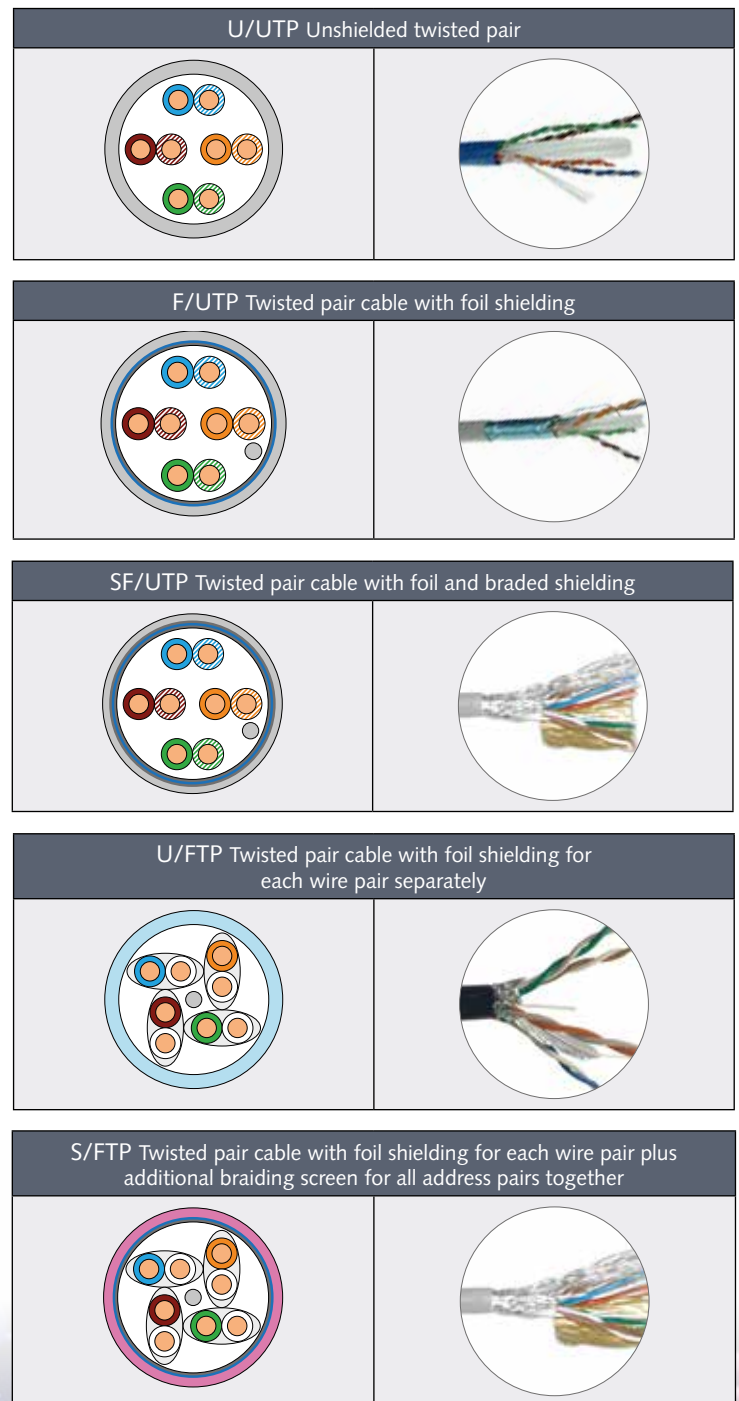
Copper CAT8

CAT8

Category 8, ISO Class 1 with a bandwidth of 2000 MHz, can be used for 100 Mbps, 1000 Mbps, 10 Gigabit and up to 40 Gigabit ethernet networks up to a maximum length of 30 meters.

2000 MHz · COPPER CONDUCTORS · 50µ GOLD · PoE · 100% TESTED · 5 YEAR WARRANTY

S/FTP

Twisted pair cable with foil shielding for each wire pair plus additional braiding screen for all address pairs together.

Patch cable

Cable on reel
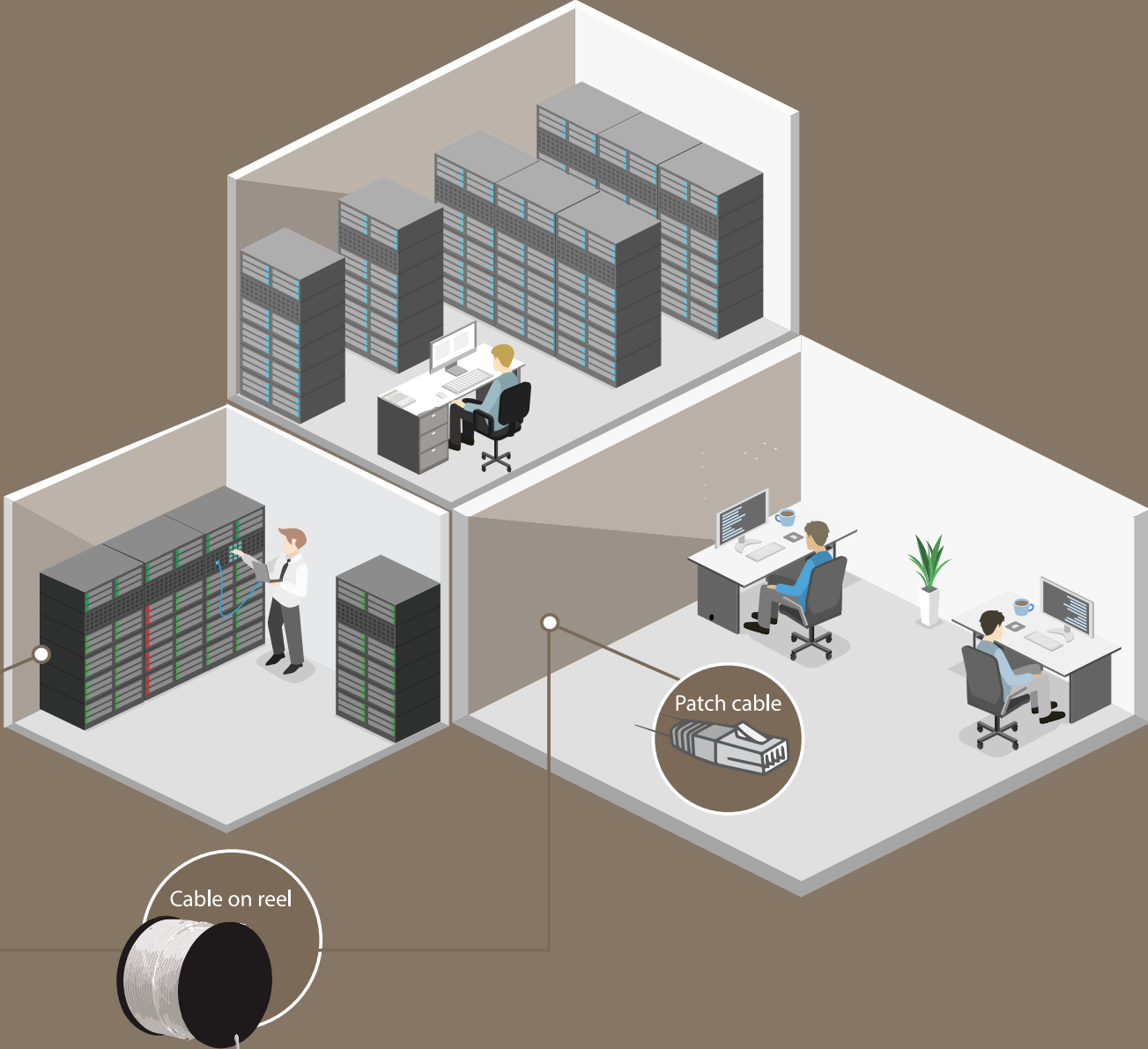
CAT8 S/FTP LSZH patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	1m	1,5m	2m	3m	5m
Yellow	FB8001	FB8051	FB8002	FB8003	FB8005

Keystone CAT8

Type no.	Cable mounting	Colour	Type no.
Shielded toolfree	Back	Full metal	TD8511
ACT keystones are compatibel with all ACT connecting hardware			

Patchpanel CAT8

Type no.	Ports	Application	Type no.
Keystone panel	24 ports	Suitable for mounting keystones	PP1030

Tools

Type no.	Application	Type no.
LSA Tool	Dogging tool for LSA contacts	64172K
Stripper	Stripper for data contacts	FHT501
110 block punchtool	Dogging tool for 110 block	TD060

Copper CAT6A

CAT6A

Category 6A
Category 6A, ISO Class EA with a bandwidth of 500 MHz, can be used for 100 Mbps, 1000 Mbps and 10 Gigabit ethernet networks up to a maximum length of 100 meters. Besides ethernet, these cables are suitable for many other protocols, such as analog telephony, ISDN, PoE, ATM, Token Ring and RS-232 up to a distance of 100 meters.

500 MHz COPPER CONDUCTORS 50µ GOLD PoE 100% TESTED 5 YEAR WARRANTY

Below you will find an overview of the different cable types with the corresponding abbreviations:

U/UTP Unshielded twisted pair.	F/UTP Twisted pair cable with foil shielding.	SF/UTP Twisted pair cable with foil and braded shielding.	U/FTP Twisted pair cable with foil shielding for each wire pair separately.	S/FTP Twisted pair cable with foil shielding for each wire pair plus additional braiding screen for all address pairs together.

Cable on reel

Patch cable

CAT6A, stranded twisted pair cable

Colour	Shielding	Outer Jacket	AWG	305m box
Grey	U/UTP	PVC	24	EP400B
Red	U/UTP	PVC	24	EP455B
Blue	U/UTP	PVC	24	EP456B
Green	U/UTP	PVC	24	EP457B
Yellow	U/UTP	PVC	24	EP458B
Black	U/UTP	PVC	24	EP459B
Grey	S/FTP	PVC	26	FP700B

CAT6A solid twisted pair installation cable

Colour	Shielding	Outer Jacket	AWG	CPR level	DoP	305m reel	500m reel
Blue	U/UTP	PVC	23	Eca	1186892	XS6103	XS6105
Violet	U/UTP	LSZH	23	Eca	1186891	XS6113	XS6115
Grey	F/UTP	PVC	24	Eca	1186889	FS6103	FS6105
Violet	F/UTP	LSZH	24	Eca	1186890	FS6113	FS6115
Grey	F/UTP	PVC	23	B2ca	1175345	XS6120	XS6121

CAT6A - connecting hardware assortment

COPPER CAT6A

Wall outlets | Surface mounted boxes CAT6A

Type no.	Application	Connector	Type no.
Shielded	Surface mounted box	1 x RJ45, 1 x IDC	FA7005
Shielded	Surface mounted box	2 x RJ45, 2 x IDC	FA7004
Shielded	Consolidation point	8 x RJ45, 8 x IDC	FA7001
Keystone outlet	In-wall box	2 x Unloaded keystone	FA6010

Keystone CAT6A

Type no.	Cable mounting	Colour	Type no.
Unshielded toolfree	Downside	Black	TD6016
Unshielded toolfree	Downside	White	TD6017
Shielded punch down	Back	Full metal	TD6511
Shielded punch down	Downside	Full metal	TD6023
Shielded toolfree	Back	Full metal	TD6510
Keystone coupler RJ45 Shielded	Back	Full metal	SD6519
ACT keystones are compatibel with all ACT connecting hardware			

Compatible with all mentioned keystones

Gira*
19100

Peha*
740011
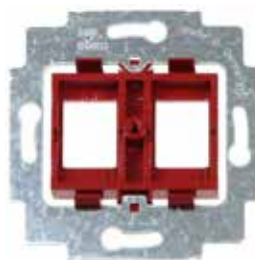
Busch-Jaeger*
2CKA001753A8055
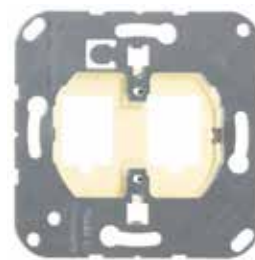
Jung*
569-2NWE / CD569-2NWEWW

All brand names mentioned are the property of their respective trademark owners.

Patchpanel CAT6A

Type no.	Ports	Connector	Type no.
Shielded	24 ports	RJ45, IDC	PP1020
Keystone panel	24 ports	Suitable for mounting keystones	PP1030
Shielded	Consolidation point	8 x RJ45, 8 x IDC	FA7001

Connectors CAT6A

Type no.	Application	Type no.
Shielded	Suitable for solid and stranded cable with positioning block, AWG24 (1,2 mm)	FA2000
Shielded	Suitable for solid and stranded cable with positioning block, AWG23 (1,5 mm)	FA2001

Tools

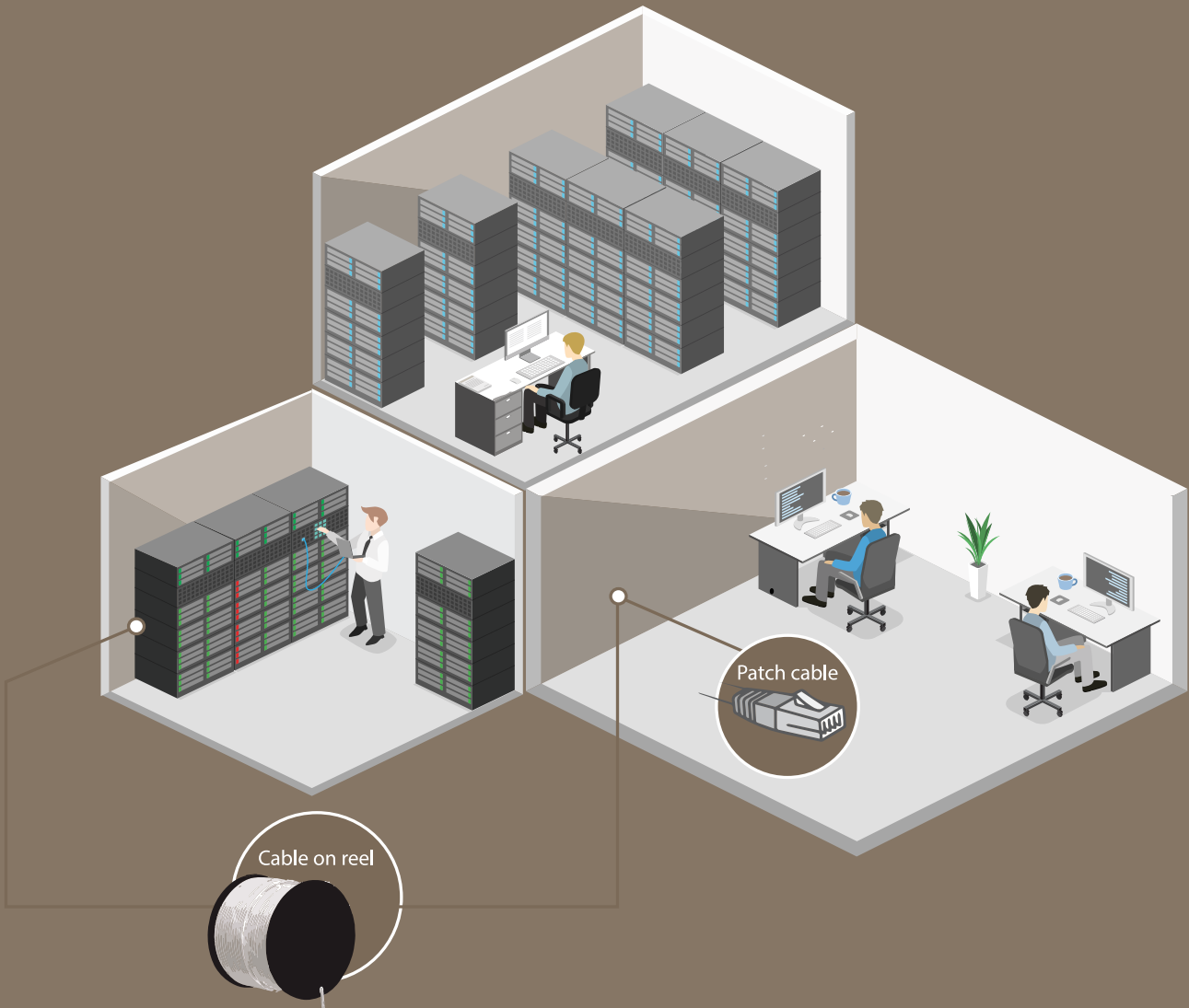| Type no.	Application	Type no.
LSA Tool	Dogging tool for LSA contacts	64172K
Stripper	Stripper for data contacts	FHT501
110 block punchtool	Dogging tool for 110 block	TD060
Modular crimptool	Strip, cut the cable - crimp the connectors to the cable (AWG23/24 conductors)	WL2000

CAT6A - patch cable

CAT6A U/UTP PVC snagless patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	2.5m	3m	4m	5m	7m	10m	15m	20m
Ivory	IB3252	IB3200	IB3201	IB3251	IB3202		IB3203		IB3205	IB3207	IB3210	IB3215	IB3220
Grey	IB3052	IB3000	IB3001	IB3051	IB3002	IB3053	IB3003	IB3004	IB3005	IB3007	IB3010	IB3015	IB3020
Red	IB2552	IB2500	IB2501	IB2551	IB2502		IB2503		IB2505	IB2507	IB2510	IB2515	IB2520
Blue	IB2652	IB2600	IB2601	IB2651	IB2602		IB2603		IB2605	IB2607	IB2610	IB2615	IB2620
Green	IB2752	IB2700	IB2701	IB2751	IB2702		IB2703		IB2705	IB2707	IB2710	IB2715	IB2720
Yellow	IB2852	IB2800	IB2801	IB2851	IB2802		IB2803		IB2805	IB2807	IB2810	IB2815	IB2820
Black	IB2952	IB2900	IB2901	IB2951	IB2902		IB2903		IB2905	IB2907	IB2910	IB2915	IB2920
Orange		IB2100	IB2101	IB2151	IB2102		IB2103		IB2105	IB2107	IB2110	IB2115	IB2120
Brown		IB2200	IB2201	IB2251	IB2202		IB2203		IB2205	IB2207	IB2210	IB2215	IB2220
Purple		IB2300	IB2301	IB2351	IB2302		IB2303		IB2305	IB2307	IB2310	IB2315	IB2320
Pink		IB2400	IB2401	IB2451	IB2402		IB2403		IB2405	IB2407	IB2410	IB2415	IB2420
White		IB6300	IB6301	IB6351	IB6302		IB6303		IB6305	IB6307	IB6310	IB6315	IB6320

CAT6A U/UTP PVC patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m
Ivory	IB3352	IB3300	IB3301	IB3351	IB3302	IB3303	IB3305	IB3307	IB3310	IB3315	IB3320
Grey	IB3452	IB3400	IB3401	IB3451	IB3402	IB3403	IB3405	IB3407	IB3410	IB3415	IB3420
Red		IB3700	IB3701	IB3751	IB3702	IB3703	IB3705	IB3707	IB3710	IB3715	IB3720
Blue		IB3800	IB3801	IB3851	IB3802	IB3803	IB3805	IB3807	IB3810	IB3815	IB3820
Green		IB3900	IB3901	IB3951	IB3902	IB3903	IB3905	IB3907	IB3910	IB3915	IB3920
Yellow		IB4100	IB4101	IB4151	IB4102	IB4103	IB4105	IB4107	IB4110	IB4115	IB4120
Black		IB4200	IB4201	IB4251	IB4202	IB4203	IB4205	IB4207	IB4210	IB4215	IB4220
Orange		IB4300	IB4301	IB4351	IB4302	IB4303	IB4305	IB4307	IB4310	IB4315	IB4320
Brown		IB4400	IB4401	IB4451	IB4402	IB4403	IB4405	IB4407	IB4410	IB4415	IB4420
Purple		IB6600	IB6601	IB6651	IB6602	IB6603	IB6605	IB6607	IB6610	IB6615	IB6620
Pink		IB7300	IB7301	IB7351	IB7302	IB7303	IB7305	IB7307	IB7310	IB7315	IB7320
White		IB9300	IB9301	IB9351	IB9302	IB9303	IB9305	IB9307	IB9310	IB9315	IB9320

CAT6A U/UTP LSZH patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m
Ivory	IB1052	IB1000	IB1001	IB1051	IB1002	IB1003	IB1005	IB1007	IB1010	IB1015	IB1020
Grey	IB1152	IB1100	IB1101	IB1151	IB1102	IB1103	IB1105	IB1107	IB1110	IB1115	IB1120
Red		IB1200	IB1201	IB1251	IB1202	IB1203	IB1205	IB1207	IB1210		
Blue		IB1300	IB1301	IB1351	IB1302	IB1303	IB1305	IB1307	IB1310		
Green		IB1400	IB1401	IB1451	IB1402	IB1403	IB1405	IB1407	IB1410		
Yellow		IB1900	IB1901	IB1951	IB1902	IB1903	IB1905	IB1907	IB1910		
Black		IB3500	IB3501	IB3551	IB3502	IB3503	IB3505	IB3507	IB3510		

CAT6A U/UTP PVC cross-over patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m
cable / Boot	IB6200	IB6201	IB6251	IB6202	IB6203	IB6205

CAT6A S/FTP PVC PIMF snagless patch cable, AWG26 CU, 50µ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m	25m	30m
Ivory	FB6052	FB6000	FB6001	FB6051	FB6002	FB6003	FB6005	FB6007	FB6010	FB6015	FB6020	FB6025	FB6030
Grey	FB3052	FB3000	FB3001	FB3051	FB3002	FB3003	FB3005	FB3007	FB3010	FB3015	FB3020	FB3025	FB3030
Red		FB6500	FB6501	FB6551	FB6502	FB6503	FB6505	FB6507	FB6510	FB6515	FB6520	FB6525	FB6530
Blue		FB6600	FB6601	FB6651	FB6602	FB6603	FB6605	FB6607	FB6610	FB6615	FB6620	FB6625	FB6630
Green		FB6700	FB6701	FB6751	FB6702	FB6703	FB6705	FB6707	FB6710	FB6715	FB6720	FB6725	FB6730
Yellow		FB6800	FB6801	FB6851	FB6802	FB6803	FB6805	FB6807	FB6810	FB6815	FB6820	FB6825	FB6830
Black		FB6900	FB6901	FB6951	FB6902	FB6903	FB6905	FB6907	FB6910	FB6915	FB6920	FB6925	FB6930
Orange		FB2100	FB2101	FB2151	FB2102	FB2103	FB2105	FB2107	FB2110	FB2115	FB2120	FB2125	FB2130
Brown		FB2200	FB2201	FB2251	FB2202	FB2203	FB2205	FB2207	FB2210	FB2215	FB2220	FB2225	FB2230
Purple		FB2300	FB2301	FB2351	FB2302	FB2303	FB2305	FB2307	FB2310	FB2315	FB2320	FB2325	FB2330
Pink		FB2400	FB2401	FB2451	FB2402	FB2403	FB2405	FB2407	FB2410	FB2415	FB2420	FB2425	FB2430
White		FB6400	FB6401	FB6451	FB6402	FB6403	FB6405	FB6407	FB6410	FB6415	FB6420	FB6425	FB6430

CAT6A S/FTP PIMF LSZH patch cable, AWG26 CU, 50µ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m	25m	30m
Ivory	IB3652	IB3600	IB3601	IB3651	IB3602	IB3603	IB3605	IB3607	IB3610	IB3615	IB3620	IB3625	IB3630
Grey	IB4052	IB4000	IB4001	IB4051	IB4002	IB4003	IB4005	IB4007	IB4010	IB4015	IB4020	IB4025	IB4030
Red		IB5000	IB5001	IB5051	IB5002	IB5003	IB5005	IB5007	IB5010				
Blue		IB5300	IB5301	IB5351	IB5302	IB5303	IB5305	IB5307	IB5310				
Green		IB7400	IB7401	IB7451	IB7402	IB7403	IB7405	IB7407	IB7410				
Yellow		IB9100	IB9101	IB9151	IB9102	IB9103	IB9105	IB9107	IB9110				
Black		IB9200	IB9201	IB9251	IB9202	IB9203	IB9205	IB9207	IB9210				

CAT6A S/FTP PIMF, LSZH patch cable snagless AWG26 CU, 50µ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m	30m
Ivory	FB7452	FB7400	FB7401	FB7451	FB7402	FB7403	FB7405	FB7407	FB7410	FB7415	FB7420	FB7430
Grey	FB7052	FB7000	FB7001	FB7051	FB7002	FB7003	FB7005	FB7007	FB7010	FB7015	FB7020	FB7030
Red		FB7500	FB7501	FB7551	FB7502	FB7503	FB7505	FB7507	FB7510	FB7515	FB7520	FB7530
Blue		FB7600	FB7601	FB7651	FB7602	FB7603	FB7605	FB7607	FB7610	FB7615	FB7620	FB7630
Green		FB7700	FB7701	FB7751	FB7702	FB7703	FB7705	FB7707	FB7710	FB7715	FB7720	FB7730
Yellow		FB7800	FB7801	FB7851	FB7802	FB7803	FB7805	FB7807	FB7810	FB7815	FB7820	FB7830
Black		FB7900	FB7901	FB7951	FB7902	FB7903	FB7905	FB7907	FB7910	FB7915	FB7920	FB7930
Orange		FB7100	FB7101	FB7151	FB7102	FB7103	FB7105	FB7107	FB7110	FB7115	FB7120	FB7130
Purple		FB8700	FB8701	FB8751	FB8702	FB8703	FB8705	FB8707	FB8710	FB8715	FB8720	FB8730
Pink		FB8800	FB8801	FB8851	FB8802	FB8803	FB8805	FB8807	FB8810	FB8815	FB8820	FB8830
White		FB7300	FB7301	FB7351	FB7302	FB7303	FB7305	FB7307	FB7310	FB7315	FB7320	FB7330

CAT6A U/FTP PVC High Flex Tangle-Free patch cable, AWG26 CU, 50µ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m
Black	FB5000	FB5001	FB5051	FB5002	FB5003	FB5005	FB5007	FB5010	FB5015	FB5020

CAT6A - slimline patch cable

When to use slimline patch cables?

Not snagless

Snagless

Slimline patch cables can be used in places where cable space is limited, such as datacenters. Compared to standard patch cables, the slimline version is more than 40% smaller in diameter. These cables reduce the amount of cable space required in each individual rack, saves you time, money and resources.

Key benefits of the slimline patch cables :

• *Energy efficiency*
Because the slimline patch cables are 40% thinner and more flexible than normal patch cables they have less air resistance. Therefore the airflow is improved, resulting in maximum energy efficiency. Better for the environment and lowering the energy bill!

• *Better cable management and saving space*
The slimline cable has a smaller diameter, therefore precious space can be saved in your server room. Especially when bundling slimline cables, a lot less volume is used. Together with the greater flexibility, cable management improves significantly.

Snagless connectors :
A Snagless connector has a small "flap" that covers the RJ-45 connector lock. This "flap" prevents that the connector lock will break or will be tangled with other cables when installing or reorganising the cables.
All of our slimline datacenter cables have snagless connectors.
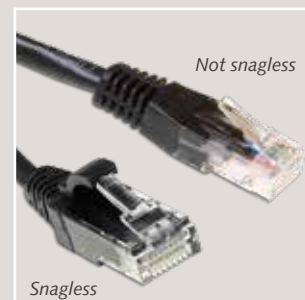
CAT6A U/FTP LSZH datacenter slimline patch cable, AWG32 CU, 50μ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m
Grey	DC7052	DC7000	DC7001	DC7051	DC7002	DC7003	DC7005
Red	DC7552	DC7500	DC7501	DC7551	DC7502	DC7503	DC7505
Blue	DC7652	DC7600	DC7601	DC7651	DC7602	DC7603	DC7605
Green	DC7752	DC7700	DC7701	DC7751	DC7702	DC7703	DC7705
Yellow	DC7852	DC7800	DC7801	DC7851	DC7802	DC7803	DC7805
Black	DC7952	DC7900	DC7901	DC7951	DC7902	DC7903	DC7905

Permanent link and channel

Permanent link

Permanent link is the connection from a patchpanel to the working area outlet (also called the horizontal cabling).
This is the permanent mounted solid cable which will be kept in place for longer periods of time. The maximum permitted length is 90 m.

Patch panel

HORIZONTAL CABLING (MAX. 90m)

Outlet

PERMANENT LINK
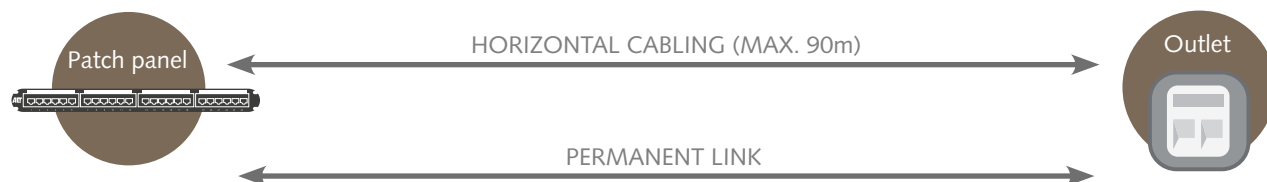
Channel

Channel is the complete connection from an active device such as a switch to a network card in a computer. So this includes patch cables together with the horizontal cabling. The horizontal cabling together with the patch cords may not exceed 100 m.

Patch cable Patch Copper panel

HORIZONTAL CABLING (MAX.90m)

Outlet Patch Patch cable

CHANNEL (MAX. 100M)

ACT structured cabling systems – Interoperable and comply with international standards
ACT copper and fiber network solutions are durable and exceed the specifications of the international standards.
Every product is covered with a product warranty of 5 years that ensures performance as expected in ACT networks, as well when they are used to extend other vendors networks.

The ACT portfolio consists of a wide range of copper installation cable and connecting hardware in as well Category 5E, Category 6, Category 6A 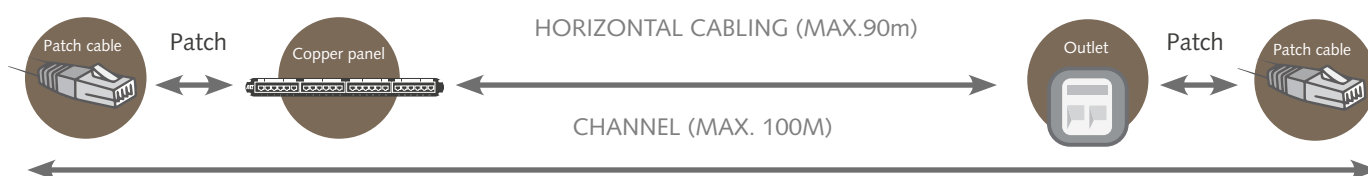and Category 8 that covers as well unshielded as shielded solution. The ACT portfolio characterizes in quality and convenience. With these components, structured cabling systems can be tailored for regular office systems, 4-connector link solutions and cross connect systems.

Copper ACT cables are suitable for installations where as well, PoE, PoE+ or PoE++ can be applied.
To construct your vertical backbones and building interconnections the ACT portfolio offers a wide range of fiber cabling and connecting hardware in as well single mode as multi-mode. Our of the shelf pre-fab fiber assemblies help you to set up your fiber links rapidly and secure.

ACT cabling specialists are ready to assist you to choose a solution.
Below an overview of the international standards ACT complies to:

Componenten	CAT5e	CAT6	CAT6A	CAT8
Bandwidth	100 Mhz	250 Mhz	500 Mhz	2000 Mhz
ISO-norm	ISO 1801Ed2.0 (2002)	ISO 11801Ed2.0 (2002)	ISO 11801 (CE2008)	ISO/11801-1 (2017)
EN-norm	EN50173-1 (2008)	EN50173-1 (2008)	EN50173-1 (2008)	EN50173-5 (2018)
Class	Class D	Class E	Class Ea	Class I
EIA/TIA-norm	EIA/TIA568-C	EIA/TIA 568-C	EIA/TIA 568-C	EIA/TIA-568-D

Flexibility

Flexibility in your network is achieved by using consolidation points.

Challenge

Consolidation points add an extra transition to your cabling. Extra transitions point course extra attenuation.

Solution

By using component level patch cables network reliability is guaranteed because extra attenuation is compensated.

ACT component level patch cables

Flexibility in your network is achieved by using consolidation points. But consolidation points add an extra transition to your cabling. This can affect the reliability of your network. By using component level patch cables network reliability is guaranteed. The component level patch cables run from the outlet to your pc or other active equipment like access point or phone.

ACT offers consolidation points in CAT5E up to CAT6A (they can be found in the product overviews under patchpanels).

Did you know that one extra transition / cable in the network also adds two extra connectors (each cable has 2 connectors)? This results in an additional connector transition in the horizontal cabling: the so-called 4-connector model.

Patch cable component level

ACT component level patch cables

Component level patch cables guarantee optimal performance with a 4 connector link. These 4 connector links are used for consolidation points that are often placed near desk islands and cross connect systems in datacenters. For more information see page 17.

Length of consolidation connections in CAT6 class E and CAT6A class EA
The adjacent connection lengths are simulated based on 10m of patch cable in addition to the two cables.

Using a consolidation point in an installation enables flexible furnishing of an office. From the consolidation point you bridge the last meters to the wall outlet with normal solid installation cable. The maximum length of the total installation cable is 90 meters. We advise to use a maximum of 30 meters from the consolidation point to the outlet.

- PP = Patchpanel
- CP = Consolidation point
- WO = Wall outlet

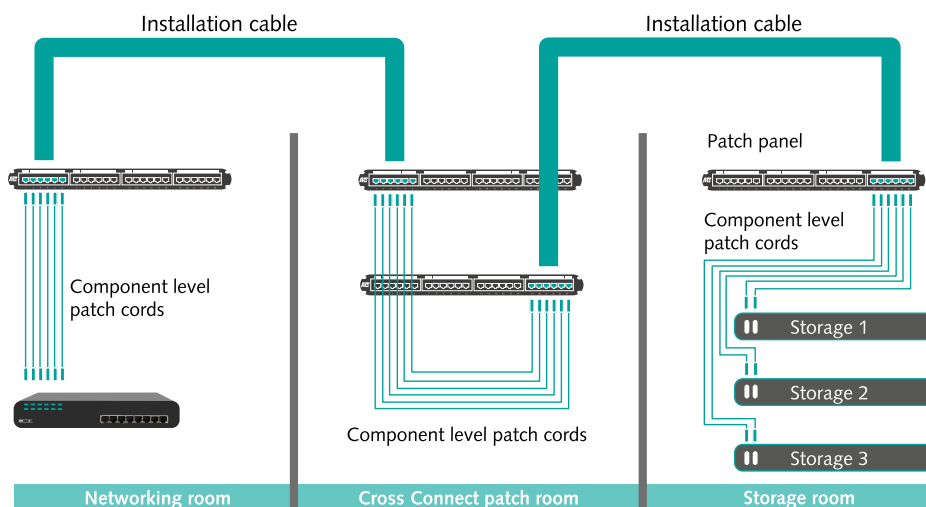| Segment PP-CP	Segment CP-WO
60	30
65	25
75	15
85	5

Cross connects in datacenters – Another use for component level patchcables

Within datacenters the networking and storage are typically in a separate location. They are connected with each other via an installation cable. Somewhere in the middle you can find a cross connect patch room where cabling can easily be rerouted/repatched. Reasons datacenters choose for this setup are:

- Flexibility: in datacenters it is crucial to be able to fast and easily reroute cabling.
- Minimizing risks: High costs storage servers and networking equipment should have as little contact as possible with employees. Having employees doing all the repatching at a cross connect space in the middle minimizes contact with expensive equipment.

The cross connect patch room has incoming solid installation cables from the networking and storage area, which is terminated on patch panels. Between the patchpanels component level patchcables are used to repatch / reroute connections. The 2 extra patchpanels also add 2 transitions to your network. This can affect the reliability of your network. By using component level patchcables the network reliability is guaranteed.

The component level patchcables are used in the connection to the equipment in the networking and server locations as well in the cross connect room.

Installation cable   Installation cable

Patch panel

Component level patch cords

Component level patch cords

Storage 1

Storage 2

Storage 3

Component level patch cords

Networking room   Cross Connect patch room   Storage room

Testing your cabling

When you buy ACT products you are assured of consistent quality products that exceed international standards. However these different components have to be installed the right way in order to ensure a trouble free operating network.

Most common mistakes during installation:
During installations the following mistakes are most common:
- The cabling is bent more than the maximum advised bending radius (or even folded)
- Untwisting the pairs too much when cutting the jacket.
- The cables have been tightened to hard with cable ties
- During installation the cables are being pulled to hard

Why testing is important
Some of these mistakes can't be visually checked and that is why we advise to test every permanent link, from patchpanel to wall outlet.
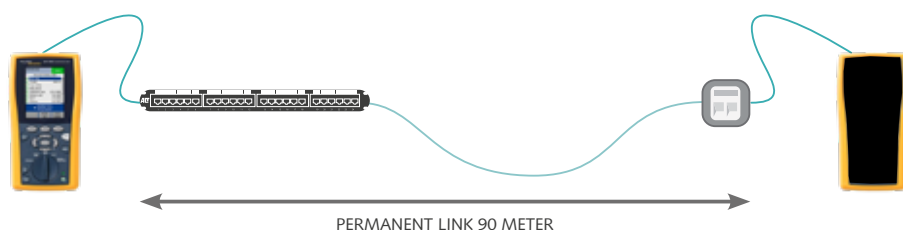
Testing a link from the patch panel to the wall sockets.

PERMANENT LINK 90 METER

Copper CAT6

CAT6

Category 6, ISO Class E with a bandwidth of 250 MHz, can be used for 100 Mbps and 1000 Mbps ethernet networks, up to a maximum length of 100 meters. 10 Gbps ethernet can be used for a maximum length of 55 meters. Because of alien crosstalk, the maximum length is only 37 meters when the cables are bundled. Besides ethernet, these cables are also suitable for many other protocols, such as analog telephony, PoE, ISDN, ATM, Token Ring and RS-232 up to a distance of 100 meters.

Below you will find an overview of the different cable types with the corresponding abbreviations:

U/UTP Unshielded twisted pair.	F/UTP Twisted pair cable with foil shielding.	SF/UTP Twisted pair cable with foil and braded shielding.	U/FTP Twisted pair cable with foil shielding for each wire pair separately.	S/FTP Twisted pair cable with foil shielding for each wire pair plus additional braiding screen for all address pairs together.

Patch panel

Connector   Keystone   Wall outlet   Tools

CAT6, stranded twisted pair cable

Colour	Shielding	Outer Jacket	AWG	100m	305m box	500m reel
Ivory	U/UTP	PVC	24	EP840H	EP384B	EP845A
Grey	U/UTP	PVC	24	EP800H	EP380B	
Red	U/UTP	PVC	24	EP850H	EP385B	
Blue	U/UTP	PVC	24	EP860H	EP386B	
Green	U/UTP	PVC	24	EP870H	EP387B	
Yellow	U/UTP	PVC	24	EP880H	EP388B	
Black	U/UTP	PVC	24	EP890H	EP389B	
Grey	S/FTP	PVC	26		FP600B	
Red	S/FTP	PVC	26		FP655B	
Blue	S/FTP	PVC	26		FP656B	
Green	S/FTP	PVC	26		FP657B	
Yellow	S/FTP	PVC	26		FP658B	
Black	S/FTP	PVC	26		FP659B	

CAT6 solid twisted pair installation cable

Colour	Shielding	Outer Jacket	AWG	CPR level	DoP	100m	305m box	500m reel
Grey	U/UTP	PVC	24	Eca	1186887	XS100H	XS305B	
Grey	F/UTP	PVC	24	Eca	1186889		FS6003	FS6005
Violet	F/UTP	LSZH	24	Eca	1186890		FS6013	FS6015
Grey	U/UTP	PVC	24	B2ca	1175349		XS6001	XS6002

CAT6 - connecting hardware assortment
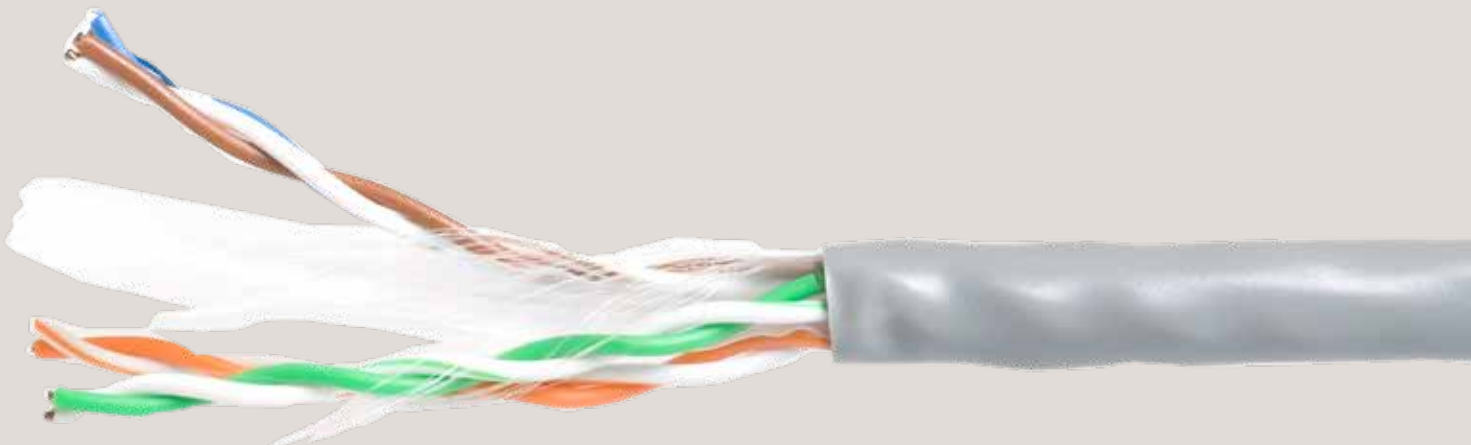
Wall outlets unshielded CAT6

Type no.	Application	Connector	Type no.
Unshielded	Surface mounted box	1 x RJ45, 1 x IDC	FA6003
Unshielded	Surface mounted box	2 x RJ45, 2 x IDC	FA6002
Keystone outlet	In-wall box	2 x Unloaded keystone	FA6010

Surface mounted boxes shielded CAT6

Type no.	Application	Connector	Type no. no.
Shielded	Surface mounted box	1 x RJ45, 1 x IDC	FA6005
Shielded	Surface mounted box	2 x RJ45, 2 x IDC	FA6004

Keystone unshielded CAT6

Type no.	Cable mounting	Colour	Type no.
Unshielded punch down	Back	Black	TD6012
Unshielded punch down	Back	White	TD6013
Unshielded punch down	Downside	Black	TD6014
Unshielded punch down	Downside	White	TD6015
Unshielded toolfree	Back	Black	TD6010
Unshielded toolfree	Back	White	TD6011
Unshielded coupler RJ45	Back	White	SD6009
ACT keystones are compatibel with all ACT connecting hardware			

Keystone shielded CAT6

Type no.	Cable mounting	Colour	Type no.
Shielded punch down	Back	Full metal	TD6021
Shielded punch down	Downside	Full metal	TD6022
Shielded toolfree	Back	Full metal	TD6020
Shielded coupler RJ 45	Back	Full metal	SD6019
ACT keystones are compatibel with all ACT connecting hardware			

Compatible with all mentioned keystones

Gira*
19100

Peha*
740011

Busch-Jaeger*
2CKA001753A8055
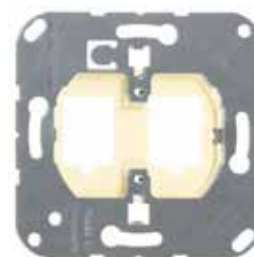
Jung*
569-2NWE / CD569-2NWEWW

All brand names mentioned are the property of their respective trademark owners.

Patchpanel CAT6

Type no.	Ports	Connector	Type no.
Unshielded	24 ports	RJ45, IDC	PP1010
Shielded	24 ports	RJ45, IDC	PP1012
Keystone paneel	24 ports	suitable for mounting keystones	PP1030
Unshielded	Consolidation point	8 x RJ45, 8 x IDC	FA6000
Shielded	Consolidation point	8 x RJ45, 8 x IDC	FA6001

Connectors CAT6

Type no.	Application	Type no.
Unshielded	Suitable for solid and stranded cable with positioning block, AWG24-AWG26	TD168M
Shielded	Suitable for solid and stranded cable with positioning block, AWG26-AWG24	TD168A
Unshielded	Suitable for solid and stranded cable with positioning block, AWG23-AWG26	TD168B
Shielded	Suitable for solid and stranded cable with positioning block, AWG23-AWG26	TD168C

Tools

Type no.	Application	Type no.
LSA Tool	Dogging tool for LSA contacts	64172K
Stripper	Stripper for data contacts	FHT501
110 block punchtool	Dogging tool for 110 block	TD060
Modular crimptool	Strip and cut the cable and crimp the connectors to the cable	TD005
Modular crimp tool	For easyconnect RJ45 connectors, Crimp and cut the wires in one step	TD168T

CAT6 - patch cable

CAT6 U/UTP PVC patch cable, AWG24 CU, 50μ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m	30m
Ivory	IB8452	IB8400	IB8401	IB8451	IB8402	IB8403	IB8405	IB8407	IB8410	IB8415	IB8420	IB8430
Grey	IB8052	IB8000	IB8001	IB8051	IB8002	IB8003	IB8005	IB8007	IB8010	IB8015	IB8020	IB8030
Red	IB8552	IB8500	IB8501	IB8551	IB8502	IB8503	IB8505	IB8507	IB8510	IB8515	IB8520	
Blue	IB8652	IB8600	IB8601	IB8651	IB8602	IB8603	IB8605	IB8607	IB8610	IB8615	IB8620	
Green	IB8752	IB8700	IB8701	IB8751	IB8702	IB8703	IB8705	IB8707	IB8710	IB8715	IB8720	
Yellow	IB8852	IB8800	IB8801	IB8851	IB8802	IB8803	IB8805	IB8807	IB8810	IB8815	IB8820	
Black	IB8952	IB8900	IB8901	IB8951	IB8902	IB8903	IB8905	IB8907	IB8910	IB8915	IB8920	
Orange		IB1500	IB1501	IB1551	IB1502	IB1503	IB1505	IB1507	IB1510	IB1515	IB1520	
Brown		IB1600	IB1601	IB1651	IB1602	IB1603	IB1605	IB1607	IB1610	IB1615	IB1620	
Purple		IB1700	IB1701	IB1751	IB1702	IB1703	IB1705	IB1707	IB1710	IB1715	IB1720	
Pink		IB1800	IB1801	IB1851	IB1802	IB1803	IB1805	IB1807	IB1810	IB1815	IB1820	
White		IB9400	IB9401	IB9451	IB9402	IB9403	IB9405	IB9407	IB9410	IB9415	IB9420	

CAT6 U/UTP PVC snagless patch cable, AWG24 CU, 50μ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	2,5m	3m	4m	5m	7m	10m	15m	20m	30m
Ivory	IS8452	IS8400	IS8401	IS8451	IS8402		IS8403		IS8405	IS8407	IS8410	IS8415	IS8420	IS8430
Grey	IS8052	IS8000	IS8001	IS8051	IS8002	IS8053	IS8003	IS8004	IS8005	IS8007	IS8010	IS8015	IS8020	IS8030
Red	IS8552	IS8500	IS8501	IS8551	IS8502		IS8503		IS8505	IS8507	IS8510	IS8515	IS8520	
Blue	IS8652	IS8600	IS8601	IS8651	IS8602		IS8603		IS8605	IS8607	IS8610	IS8615	IS8620	
Green	IS8752	IS8700	IS8701	IS8751	IS8702		IS8703		IS8705	IS8707	IS8710	IS8715	IS8720	
Yellow	IS8852	IS8800	IS8801	IS8851	IS8802		IS8803		IS8805	IS8807	IS8810	IS8815	IS8820	
Black	IS8952	IS8900	IS8901	IS8951	IS8902		IS8903		IS8905	IS8907	IS8910	IS8915	IS8920	
Orange		IS1500	IS1501	IS1551	IS1502		IS1503		IS1505	IS1507	IS1510	IS1515	IS1520	
Brown		IS1600	IS1601	IS1651	IS1602		IS1603		IS1605	IS1607	IS1610	IS1615	IS1620	
Purple		IS1700	IS1701	IS1751	IS1702		IS1703		IS1705	IS1707	IS1710	IS1715	IS1720	
Pink		IS1800	IS1801	IS1851	IS1802		IS1803		IS1805	IS1807	IS1810	IS1815	IS1820	

CAT6 U/UTP LSZH patch cable, AWG24 CU, 50μ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m	7m	10m
Grey	IB9000	IB9001	IB9051	IB9002	IB9003	IB9005	IB9007	IB9010
Red	IB9500	IB9501	IB9551	IB9502	IB9503	IB9505	IB9507	IB9510
Blue	IB9600	IB9601	IB9651	IB9602	IB9603	IB9605	IB9607	IB9610
Green	IB9700	IB9701	IB9751	IB9702	IB9703	IB9705	IB9707	IB9710
Yellow	IB9800	IB9801	IB9851	IB9802	IB9803	IB9805	IB9807	IB9810
Black	IB9900	IB9901	IB9951	IB9902	IB9903	IB9905	IB9907	IB9910

CAT6 U/UTP PVC cross-over patch cable, AWG24 CU, 50μ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	10m
cables / Boot	IB8100	IB8101		IB8102	IB8103	IB8110

CAT6 S/FTP PIMF LSZH patch cable, AWG26 CU, 50μ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m	25m	30m
Grey	FB9052	FB9000	FB9001	FB9051	FB9002	FB9003	FB9005	FB9007	FB9010	FB9015	FB9020	FB9025	FB9030
Red		FB9500	FB9501	FB9551	FB9502	FB9503	FB9505	FB9507	FB9510	FB9515	FB9520	FB9525	FB9530
Blue		FB9600	FB9601	FB9651	FB9602	FB9603	FB9605	FB9607	FB9610	FB9615	FB9620	FB9625	FB9630
Green		FB9700	FB9701	FB9751	FB9702	FB9703	FB9705	FB9707	FB9710	FB9715	FB9720	FB9725	FB9730
Yellow		FB9800	FB9801	FB9851	FB9802	FB9803	FB9805	FB9807	FB9810	FB9815	FB9820	FB9825	FB9830
Black		FB9900	FB9901	FB9951	FB9902	FB9903	FB9905	FB9907	FB9910	FB9915	FB9920	FB9925	FB9930

ACT component level patch cable

Component level patch cable guarantee optimal performance with a 4 connector link. These 4 connector links are used for consolidation points that are often placed near desk islands and cross connect systems in datacenters.

CAT6 component level U/UTP PVC snagless patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m	7m	10m
Ivory	IK8400	IK8401	IK8451	IK8402	IK8403	IK8405	IK8407	IK8410
Red	IK8500	IK8501	IK8551	IK8502	IK8503	IK8505	IK8507	IK8510
Blue	IK8600	IK8601	IK8651	IK8602	IK8603	IK8605	IK8607	IK8610
Green	IK8700	IK8701	IK8751	IK8702	IK8703	IK8705	IK8707	IK8710
Yellow	IK8800	IK8801	IK8851	IK8802	IK8803	IK8805	IK8807	IK8810
Black	IK8900	IK8901	IK8951	IK8902	IK8903	IK8905	IK8907	IK8910

When to use slimline patch cable?

Slimline patch cables can be used in places where cable space is limited, such as datacenter. Compared to standard patch cables, the slimline version is more than 40% smaller in diameter. These cables reduce the amount of cable space required in each individual rack, saves you time, money and resources.

CAT6 U/UTP LSZH datacenter slimline patch cable, AWG28 CU, 50µ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m
Grey	DC9052	DC9000	DC9001	DC9051	DC9002	DC9003	DC9005
Red	DC9552	DC9500	DC9501	DC9551	DC9502	DC9503	DC9505
Blue	DC9652	DC9600	DC9601	DC9651	DC9602	DC9603	DC9605
Green	DC9752	DC9700	DC9701	DC9751	DC9702	DC9703	DC9705
Yellow	DC9852	DC9800	DC9801	DC9851	DC9802	DC9803	DC9805
Black	DC9952	DC9900	DC9901	DC9951	DC9902	DC9903	DC9905

Power over Ethernet (PoE)

Power over Ethernet (PoE) is a technology for wired ethernet local area networks (LANs) that allows the electrical current (necessary for the operation of each device) to be carried by the data cables. Using PoE minimizes the number of wires that must be used in order to install the network. PoE was originally developed to support devices like WiFi access points (APs) and IP phones. PoE made AP installations easier and more flexible, especially on ceilings.
For PoE to work, the electrical current must go into the data cable at the power-supply end, and come out at the device end, in such a way that the current is kept separate from the data signal so that neither interferes with the other.

PoE (Type 1) for low powered devices
PoE utilizes two pairs to connect many types of lower-powered devices to the network. Based on the initial IEEE 802.3af-2003 standard, it provides up to 15.4W of DC power to each PoE port (up to 12.95W of power for each device). PoE Type 1 can support devices such as VoIP phones, sensors/meters, basic access points and simple, static surveillance cameras that don't pan, tilt or zoom.

PoE+ (Type 2) for higher powered devices
Higher-powered devices are connected to the network using PoE, based on the IEEE 802.3at-2009 standard. It is backward compatible (meaning that it can also support the types of devices typically supported by PoE), and provides 30W of DC power to each PoE port (up to 25.5W of power for each device). PoE+ can support devices such as more complex surveillance cameras that pan, tilt or zoom, as well as advanced wireless access points, LCD displays, biometric sensors and tablets.

For PoE (Power over Ethernet) applications, it is important to use installation and patch cables with full copper conductors. All ACT cables have copper conductors and are suited for networks where PoE is used.

COPPER CONDUCTORS
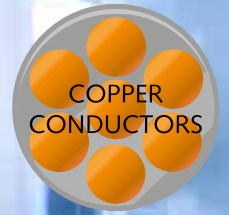
PoE++ (Type 3) 4-pair

4-pair PoE uses all four pairs in a copper cable. It provides 60W of DC power to each PoE port (up to 51W of power for each device). 4-pair POE can support devices such as videoconferencing system components and building management devices.

Higher-power PoE (Type 4)

Growing power requirements of network devices are pushing the need for higher power delivered through network cabling, which is where Higher-power PoE comes into play. It provides up to 100W of DC power to each PoE port (up to 71W of power for each device). PoE Type 4 can support devices such as laptops,TVs, and smart Led lighting for office buildings.

PoE network switch

Colour	Description	Type no.
Black	6 port, 10/100 Mbps 4x PoE+ (30W) port	AC4430
Black	24 port, 10/100 Mbps 24x PoE+ (30W) port	AC4434

Gigabit PoE+ (30W injector)

Colour	Description	Type no.
Black	Gigabit PoE+ (30W) injector	AC4438

Copper CAT5E

CAT5E

Category 5E, ISO Class D supports Gigabit networks; this cable category can be used for 100 Mbps and 1000 Mbps ethernet networks. Besides ethernet, these cables are also suitable for many other protocols, such as analog telephony, PoE, ISDN, ATM, Token Ring and RS-232 to a distance up to 100 meters.

Below you will find an overview of the different cable types with the corresponding abbreviations:

U/UTP Unshielded twisted pair.	F/UTP Twisted pair cable with foil shielding.	SF/UTP Twisted pair cable with foil and braded shielding.	U/FTP Twisted pair cable with foil shielding for each wire pair separately.	S/FTP Twisted pair cable with foil shielding for each wire pair plus additional braiding screen for all address pairs together.

Cable on reel

Patch cable

Cable on reel CAT5E, stranded twisted pair cable

Colour	Shielding	Outer Jacket	AWG	100m	305m box	500m reel
Ivory	U/UTP	PVC	24	EP100H	EP305B	EP500A
Grey	U/UTP	PVC	24	EP600H	EP360B	
Red	U/UTP	PVC	24	EP550H	EP355B	
Blue	U/UTP	PVC	24	EP560H	EP356B	
Green	U/UTP	PVC	24	EP570H	EP357B	
Yellow	U/UTP	PVC	24	EP580H	EP358B	
Black	U/UTP	PVC	24	EP590H	EP359B	
Ivory	F/UTP	LSZH	26	FP100H	FP305B	FP500A
Grey	F/UTP	LSZH	26			FP7450
Red	F/UTP	LSZH	26	FP750H		FP7550
Blue	F/UTP	LSZH	26	FP760H		FP7650
Green	F/UTP	LSZH	26	FP770H		FP7750
Yellow	F/UTP	LSZH	26	FP780H		FP7850
Black	F/UTP	LSZH	26	FP790H		FP7950
Grey	SF/UTP	LSZH	26			FP510A

CAT5E solid twisted pair installation cable

Colour	Shielding	Outer Jacket	AWG	CPR level	DoP	100m	305m box	500m reel
Grey	U/UTP	PVC	24AWG	Eca	1186884	ES100H	ES305B	ES500A
Blue	U/UTP	PVC	24AWG	Eca	1186884		ES356B	
Grey	F/UTP	PVC	26AWG	Eca	1186885	FS100H		

CAT5E - connecting hardware assortment

Wall outlets unshielded CAT5E

Type no.	Application	Connector	Type no.
Unshielded	In-wall box	2 x RJ45, 2 x IDC	FA5008
Unshielded	In-wall box	1 x RJ45, 1 x IDC	FA5003
Unshielded	In-wall box	2 x RJ45, 2 x IDC	FA5002
Keystone outlet	In-wall box	2 x Unloaded keystone	FA6010

Surface mounted boxes CAT5E

Type no.	Application	Connector	Type no.
Shielded	Surface mounted box	1 x RJ45, 1 x IDC	FA5005
Shielded	Surface mounted box	2 x RJ45, 2 x IDC	FA5004

Surface mounted boxes unloaded CAT5E

Type no.	Application	Connector	Type no.
Wall box	Surface mounted box	1 x Unloaded keystone	FA6011
Wall box	Surface mounted box	2 x Unloaded keystone	FA6012

Keystone unshielded CAT5E

Type no.	Cable mounting	Colour	Type no.
Unshielded punch down	Back	Black	TD5012
Unshielded punch down	Under	Black	TD5014
Unshielded punch down	Under	White	TD5015
Unshielded toolfree	Back	Black	TD5010
Unshielded toolfree	Back	White	TD5011
Unschielded coupler RJ45	Back	White	SD5009
ACT keystones are compatibel with all ACT connecting hardware			

Keystone shielded CAT5E

Type no.	Cable mounting	Colour	Type no.
Shielded punch down	Back	Full metal	TD5021
Shielded punch down	Under	Full metal	TD5022
Shielded toolfree	Back	Full metal	TD5020
Shielded coupler RJ45	Back	Full metal	SD5019
ACT keystones are compatibel with all ACT connecting hardware			

Compatible with all mentioned keystones

Gira*
19100

Peha*
740011
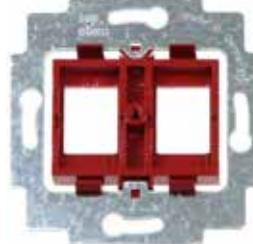
Busch-Jaeger*
2CKA001753A8055
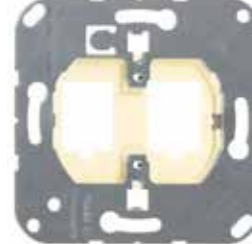
Jung*
569-2NWE / CD569-2NWEWW

All brand names mentioned are the property of their respective trademark owners.

Patchpanel CAT5E

Type no.	Ports		Type no.
Unshielded	24 ports, angled	RJ45, IDC	P24AK1
Unshielded	24 ports	RJ45, IDC	PP1001
Shielded	24 ports	RJ45, IDC	PP1002
Keystone	24 ports	Suitable for keystones	PP1030
Keystone	24 ports, angled	Suitable for keystones	PP1033
Unshielded	Consolidation point	8 x RJ45, 8 x IDC	FA5000
Shielded	Consolidation point	8 x RJ45, 8 x IDC	FA5001

Connectors CAT5E

Type no.	Application	Type no.
Unshielded	Suitable for solid and stranded cable with positioning block, AWG26-AWG24	TD1118
Shielded	Suitable for solid and stranded cable with positioning block, AWG26-AWG24	TD1138

Tools

Type no.	Application	Type no.
LSA Tool	Dogging tool for LSA contacts	64172K
Stripper	Stripper for data contacts	FHT501
110 block punchtool	Dogging tool for 110 block	TD060
Modular crimptool	Strip and cut the cable and crimp the connectors to the cable	TD005

CAT5E - patch cable

CAT5E U/UTP PVC patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m	25m	30m
Ivory	IB6452	IB6400	IB6401	IB6451	IB6402	IB6403	IB6405	IB6407	IB6410	IB6415	IB6420	IB6425	IB6430
Grey	IB6052	IB6000	IB6001	IB6051	IB6002	IB6003	IB6005	IB6007	IB6010	IB6015	IB6020	IB6025	IB6030
Red		IB5500	IB5501	IB5551	IB5502	IB5503	IB5505	IB5507	IB5510	IB5515	IB5520		
Blue		IB5600	IB5601	IB5651	IB5602	IB5603	IB5605	IB5607	IB5610	IB5615	IB5620		
Green		IB5700	IB5701	IB5751	IB5702	IB5703	IB5705	IB5707	IB5710	IB5715	IB5720		
Yellow		IB5800	IB5801	IB5851	IB5802	IB5803	IB5805	IB5807	IB5810	IB5815	IB5820		
Black		IB5900	IB5901	IB5951	IB5902	IB5903	IB5905	IB5907	IB5910	IB5915	IB5920		
Orange		IB4500	IB4501	IB4551	IB4502	IB4503	IB4505	IB4507	IB4510	IB4515	IB4520		
Brown		IB4600	IB4601	IB4651	IB4602	IB4603	IB4605	IB4607	IB4610	IB4615	IB4620		
Purple		IB4700	IB4701	IB4751	IB4702	IB4703	IB4705	IB4707	IB4710	IB4715	IB4720		
Pink		IB4800	IB4801	IB4851	IB4802	IB4803	IB4805	IB4807	IB4810	IB4815	IB4820		
White		IB5400	IB5401	IB5451	IB5402	IB5403	IB5405	IB5407	IB5410	IB5415	IB5420		

CAT5E U/UTP LSZH patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m
Grey	IB2000	IB2001	IB2051	IB2002	IB2003	IB2005	IB2007	IB2010	IB2015	IB2020

CAT5E U/UTP PVC cross-over patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m	10m
Black	IB6100	IB6101	IB6151	IB6102	IB6103	IB6105	IB6110

CAT5E F/UTP PVC patch cable, AWG26 CU, 50µ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m
Ivory	IB7200	IB7201	IB7251	IB7202	IB7203	IB7205	IB7207	IB7210	IB7215	IB7220
Grey	IB7100	IB7101	IB7151	IB7102	IB7103	IB7105	IB7107	IB7110	IB7115	IB7120

CAT5E F/UTP LSZH patch cable, AWG26 CU, 50µ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m
Grey	FB2000	FB2001	FB2051	FB2002	FB2003	FB2005	FB2007	FB2010	FB2015	FB2020
Red	IB7500	IB7501	IB7551	IB7502	IB7503	IB7505	IB7507	IB7510	IB7515	IB7520
Blue	IB7600	IB7601	IB7651	IB7602	IB7603	IB7605	IB7607	IB7610	IB7615	IB7620
Green	IB7700	IB7701	IB7751	IB7702	IB7703	IB7705	IB7707	IB7710	IB7715	IB7720
Yellow	IB7800	IB7801	IB7851	IB7802	IB7803	IB7805	IB7807	IB7810	IB7815	IB7820
Black	IB7900	IB7901	IB7951	IB7902	IB7903	IB7905	IB7907	IB7910	IB7915	IB7920

CAT5E F/UTP cross-over LSZH patch cable, AWG26 CU, 50µ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m	10m
cable Boot	IB5100	IB5101	IB5151	IB5102	IB5103	IB5105	IB5110

CAT5E SF/UTP PVC patch cable, AWG26 CU, 50µ Gold-plated contacts, not molded boots

Colour	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m
Ivory	IB7000	IB7001	IB7051	IB7002	IB7003	IB7005	IB7007	IB7010	IB7015	IB7020

ACT component level patch cable

Flexibility in your network is achieved by using consolidation points. But consolidation points add an extra transition to your cabling. This can affect the reliability of your network. By using component level patch cable network reliability is guaranteed. The component level patch cable run from the outlet to your pc or other active equipment like access point or phone.

ACT offers consolidation points in CAT5E up to CAT6A.
Did you know that one extra transition / cable in the network also adds two extra connectors (each cable has 2 connectors)?
This results in an additional connector transition in the horizontal cabling: the so-called 4-connector model.

CAT5E component level U/UTP PVC snagless patch cable, AWG24 CU, 50µ Gold-plated contacts

Colour	0.5m	1m	1.5m	2m	3m	5m	7m	10m
Ivory	IK5400	IK5401	IK5451	IK5402	IK5403	IK5405	IK5407	IK5410
Red	IK5500	IK5501	IK5551	IK5502	IK5503	IK5505	IK5507	IK5510
Blue	IK5600	IK5601	IK5651	IK5602	IK5603	IK5605	IK5607	IK5610
Green	IK5700	IK5701	IK5751	IK5702	IK5703	IK5705	IK5707	IK5710
Yellow	IK5800	IK5801	IK5851	IK5802	IK5803	IK5805	IK5807	IK5810
Black	IK5900	IK5901	IK5951	IK5902	IK5903	IK5905	IK5907	IK5910

Fiber optic cables

Reliable and future proof
More than 80% of all errors in networks and fiber optic networks are caused by failures related to cabling. Businesses that depend on excellent network performance invest in the best brands and products of active equipment like switches, servers and routers but often overlook the part that makes the biggest difference, the cabling. Customers choose for ACT cables and cabling solutions because our products are reliable and future proof. ACT cables and components meet and exceed international standards by using grade A fiber and fiber optic connectors. Premium materials ar used and al our products have 100% quality control.

Consistent low loss
In fiber optic networks it's important that all the light from the source reaches the end of the link. By using ACT cables you are ensured of a consistent low loss.

Upgrade to 40-100Gb
ACT fiber optic cables ensure low loss in networks. This makes it possible to upgrade 1Gb or 10Gb to 40-100Gb (this depends on distance and chosen fiber type).

Individual test report and third party testing facilities
All of our cables are individually tested and have an individual test report so you know every part of your network is tested and can be accounted for.

Besides our own individual testing of fiber optic cables we do provide samples to third party testing facilities who perform their own testing as a double check.

Types of fiber and distances:

Fiber Optic type	OM1	OM2	OM3	OM4	OM5	OS2
			Multimode			Singlemode
	62,5/125µm	50/125µm				9/125µm
Structur						
Distance	2000 m	550 m	300 m	400 m	440 - 150 m	10 Km
Used for	10/100 Mb/s	1 Gb/s	10 Gb/s	10 Gb/s	40-100 Gb/s	*

* Maximum length is related to the best suitable speed and depends on the transceiver.

Cable on reel

Prefab cable

Fiber patch box

Fiber patch panel

Patch cable
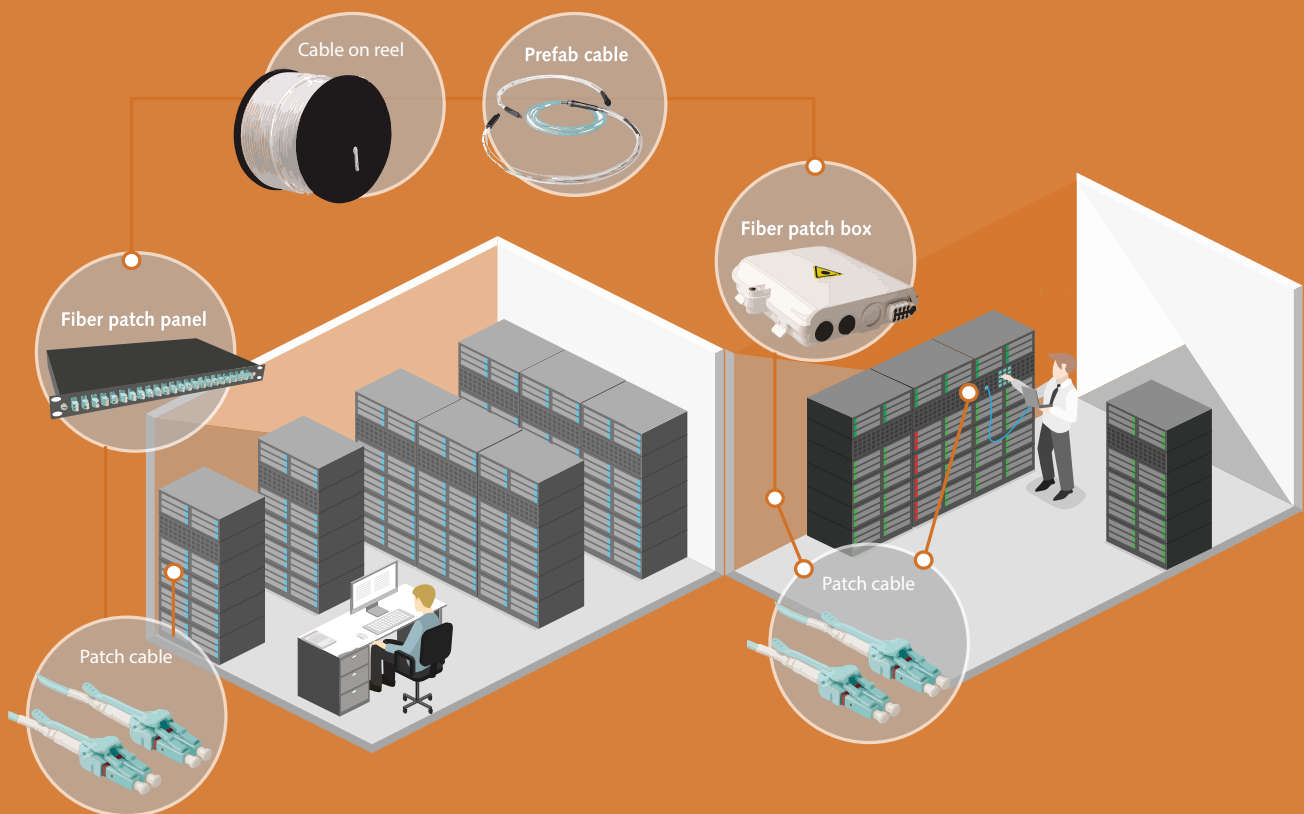
Patch cable

ACT fiber kit

ACT Fiber Kit: preterm fiber optic cables and patch cables custom made and labeled

Would you also like to save on personnel costs by faster installation of preterm fiber optic cables and patch cables in a datacenter? Less chance of errors when installing preterm fiber optic cables and patch cables? Because all products are packed per corridor? To help you, we have developed an ACT Fiber Kit: preterm fiber optic cables, MTP / MPO cables and patch cables custom made and ready to use.

What is ACT Fiber Kit?

ACT Fiber Kit consists of multiple cables that are custom made and labeled for you. These can be patch cables but also MTP/MPO cabling or preterm cabling. We make it extra convenient with the possibility to pack per corridor / aisle. You can choose to have each cable packed individually or with multiple cables at once for less waste and unpacking time during installation. ACT Fiber Kit is a turnkey tailor-made solution: preterm fiber optic cables, MTP / MPO cables and patch cables custom made and ready to use.

Why we offer it?

The ACT Fiber Kit not only ensures easy installation, but also provides significant cost savings. You save by faster installation and do not need to invest in special equipment such as a label printer and expertise

Where is it applied?

ACT Fiber Kit is suitable for use in a datacenter, server room or PoP and has been developed to relieve datacenter professionals.

Why choose ACT Fiber Kit?

✓ Time saving: You save installation time with our turnkey solution.

✓ Cost savings: The reduction in installation time also saves labour costs. You don't need to invest in a label printer and expertise.

✓ Better organised: ACT Fiber Kit consists of coded (labeled) cables. By using labeled cabling, your cabling is better organised and faults can be traced and resolved faster.

✓ Exactly the right length: No more bothering with excess cabling that you have to find a place for in precious space. Cables are made to measure, exactly the length needed.

ACTFIBERKIT
CUSTOM MADE FIBERKIT

ACT fiber optic installation cable - same day shipping

ACT installation cable range consists of fiber optic installation cables in various lengths (per meter), fiber types and number of fibers. We have this cable on stock for next day delivery.

Features:
- Fiber optic installation cable in your requested length (per meter), fiber type and fiber count.
- Suitable for indoor and outdoor use.
- Suitable for horizontal and vertical installation.
- Complies with one of the highest CPR fire classes: Cca.
- Cable offers mechanical protection against external influences.

Custom made cabling
Permanent cabling, also called installation cable, comes in several constructions, different lengths and is typically delivered on reel, for this reason it's also called cable on reel.

In addition to our stock installation cabels, ACT is specialized in custom made cabling solutions. Almost anything is possible in the field of fiber optic installation cabling. Contact our sales department with your requests.
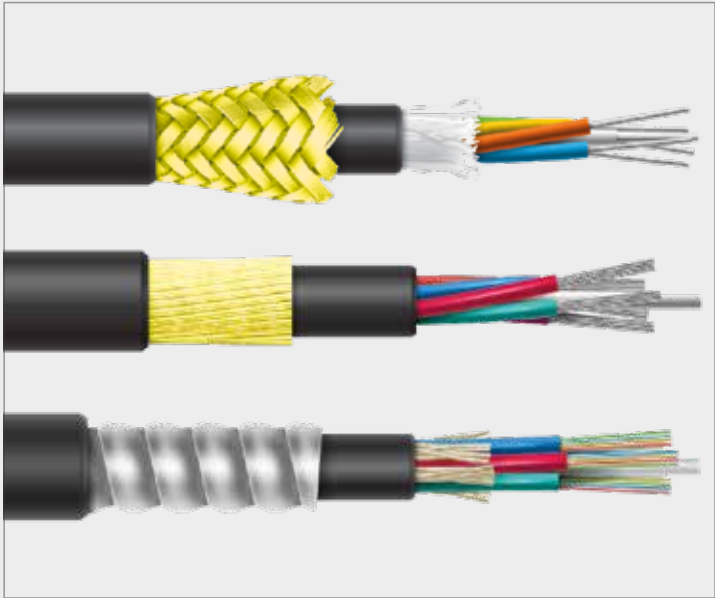
| Flexible | Halogen free | Flame retardant | Rodent protected | Moisture protected | Low smoke emission | Ultraviolet resistance | Low friction | water tight | Totally dielectric | CPR regulation |

Fiber optic installation cable (in your requested lenght per meter)

Colour	Fibers	CPR level	DoP	OM3	OS2
Black	6	Cca	0370-3935	RL4051	RL4011
Black	12	Cca	0370-3935	RL4052	RL4012
Black	24	Cca	0370-3935	RL4053	RL4013

If you order these cables on business days before 14.00 hours, they will be shipped the same day.

Preterm cables: What you should know?

With preterm cables you can easily and quickly install a fiber optic network. There are a number of points to be aware of when installing preterm cables. In this article we explain the most important ones.

Structure of a preterm cable

A preterm cable is actually a cable assembly, a combination of different cables and connectors into one assembled ready-to-use product. A fiber optic preterm cable nearly almost always contains multiple fibers.

A preterm cable usually consists of the following parts:

- Installation cable: a robust installation cable that is suitable for bridging longer distances and offers good protection against external influences.

- Fanout kit: the transition from the installation cable to the fanout cables.

- Cable gland: is in some cases attached on the fanout kit and aims to fix the cable to, for example, a patch panel or fiber box.

- Fanout cables: are multiple small diameter cables with a fiber optic connector at the end.

Achieving the right length

In order to calculate the correct preterm cable length, it is essential to consider the following things:

Straight line distance: The distance between the two points you want to connect without considering any obstacles.

Horizontal distance: Usually you cannot move your cable from point a to point b without having to lay the cable around objects. Keep in mind that in datacenters, for example, cables are usually routed through a cable duct / fiber raceway.

Vertical distance: It is also important to consider the vertical distance. If the cable has to come out halfway through a 19″ cabinet, it is important to count the distance from halfway through the cabinet to the cable duct (which may be in the ceiling or in the floor).

We recommend that you always choose a slightly longer cable than is calculated. Often there is an additional obstacle that has not been taken into account beforehand. Short over lengths are easy to eliminate. If a cable is too short it cannot be extended.

In that case an extra cable has to be connected and this causes an extra transition and optical losses.

Note: Is the length of the cable specified? This refers only to the installation cable and not to the fanout kit and the fanout cables. For more info, see the technical drawing below.

$740(^{+50}_{-0})$mm
$660(^{+50}_{-0})$mm
$580(^{+50}_{-0})$mm
$500(^{+50}_{-0})$mm

$L\ (^{+200}_{-0})$mm

$740(^{+50}_{-0})$mm
$660(^{+50}_{-0})$mm
$580(^{+50}_{-0})$mm
$500(^{+50}_{-0})$mm

$150(\pm25)$mm

INSTALLATION CABLE

FANOUT CABLE

CABLE GLAND
FANOUT KIT
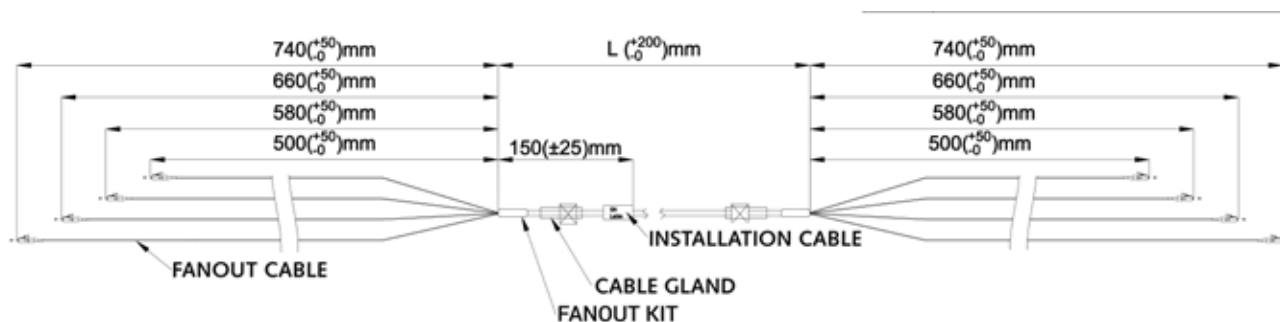
Protect the fanout cables and connectors
When installing a preterm cable, it is important to protect the fanout cables and connectors. These are the most vulnerable parts that can be damaged without protection. We advise to use a protective tube during installation. The protection tube can be removed after installation. ACT preterm cables are standard equipped with a protection tube on both sides of the cable for optimal protection.

Preferred installation
We recommend to lay the cable when possible and if installing is not an option then pull the cable. The fibers in a fiber optic cable can be damaged by pulling. Fiber optic cables are designed to withstand tensile load so that the fiber remains protected, this is called strain relief. It is important to strain within the specifications of the cable.

This maximum specified tensile load of a cable applies to the installation cable but not to the fanout cables. Of these, the tensile load is much smaller. To solve this, ACT preterm cables are equipped with a pulling rope on one side at the end of the protection tube. If this is pulled, the tensile load is placed on the installation cable and not on the fanout cables.

Tube for outdoor use
Preterm cables are also suitable for outdoor use. Please note that most variants are not suitable for direct burial without any form of protection. The influences from outside are much greater than with indoor use, especially rodents. For this reason, when using preterm cables outside, a tube is required. An exception to this are preterm cables with an armoured outer jacket, which offer sufficient protection against external influences because of the armouring.
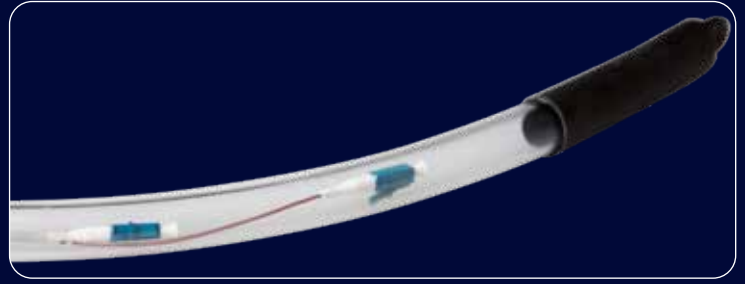
Preterm cables - a do it yourself solution

Preterm cables are used by the following target audiences:
- Network installers that are not specialized in termination of fiber optics
- System integrators
- Datacenters

By using preterm cables you have the following advantages:
- Connectors are terminated and tested in a clean room production environment
- Cables come with individual test reports on insertion loss
- No need to investment in equipment for splicing or testing
- Up to 80% less installation time (compared to terminating your own connectors)
- Connectors are protected by protective tubing during installation

Stock assortment
We have a stock of preterm cables in lengths from 10 up to 300 meters in both OM3 and OS2. These are Loose tube indoor / outdoor cables with 4 or 8 fibers. All other types will be custom made with very short lead-time.

Our experts are avaible to help you choose the best option for your case.

4 Fibers preterm indoor/outdoor cables OS2, with LC connectors

Colour	10m	20m	30m	40m	50m	60m	70m	80m	90m	100m
Yellow	RL2301	RL2302	RL2303	RL2304	RL2305	RL2306	RL2307	RL2308	RL2309	RL2310
	110 m	120 m	130 m	140 m	150 m	160 m	170 m	180 m	190 m	200 m
Yellow	RL2311	RL2312	RL2313	RL2314	RL2315	RL2316	RL2317	RL2318	RL2319	RL2320
	210 m	220 m	230 m	240 m	250 m	260 m	270 m	280 m	290 m	300 m
Yellow	RL2321	RL2322	RL2323	RL2324	RL2325	RL2326	RL2327	RL2328	RL2329	RL2330

4 Fibers preterm indoor/outdoor cables OM3, with LC connectors

Colour	10m	20m	30m	40m	50m	60m	70m	80m	90m	100m
Aqua	RL2401	RL2402	RL2403	RL2404	RL2405	RL2406	RL2407	RL2408	RL2409	RL2410
	110 m	120 m	130 m	140 m	150 m	160 m	170 m	180 m	190 m	200 m
Aqua	RL2411	RL2412	RL2413	RL2414	RL2415	RL2416	RL2417	RL2418	RL2419	RL2420
	210 m	220 m	230 m	240 m	250 m	260 m	270 m	280 m	290 m	300 m
Aqua	RL2421	RL2422	RL2423	RL2424	RL2425	RL2426	RL2427	RL2428	RL2429	RL2430

8 Fibers preterm indoor/outdoor cables OS2, with LC connectors

Colour	10m	20m	30m	40m	50m	60m	70m	80m	90m	100m
Yellow	RL4101	RL4102	RL4103	RL4104	RL4105	RL4106	RL4107	RL4108	RL4109	RL4110
	110m	120m	130m	140m	150m	160m	170m	180m	190m	200m
Yellow	RL4111	RL4112	RL4113	RL4114	RL4115	RL4116	RL4117	RL4118	RL4119	RL4120
	210m	220m	230m	240m	250m	260m	270m	280m	290m	300m
Yellow	RL4121	RL4122	RL4123	RL4124	RL4125	RL4126	RL4127	RL4128	RL4129	RL4130

8 Fibers preterm indoor/outdoor cables OM3, with LC connectors

Colour	10m	20m	30m	40m	50m	60m	70m	80m	90m	100m
Aqua	RL4201	RL4202	RL4203	RL4204	RL4205	RL4206	RL4207	RL4208	RL4209	RL4210
	110m	120m	130m	140m	150m	160m	170m	180m	190m	200m
Aqua	RL4211	RL4212	RL4213	RL4214	RL4215	RL4216	RL4217	RL4218	RL4219	RL4220
	210m	220m	230m	240m	250m	260m	270m	280m	290m	300m
Aqua	RL4221	RL4222	RL4223	RL4224	RL4225	RL4226	RL4227	RL4228	RL4229	RL4230

Preterm cables – minimize installation time and labor in your datacenter or server room

For fast and easy installation of installation and backbone cabling in your datacenter choose ACT preterm cabling

ACT for all your MAC (Moves Adds and Changes)
Unique is that ACT keeps stock of preterm fiber cabling.
For you this means you can start directly if you want to change or expand your backbone cabling.

Cabling on stock
We have stock in Singlemode and Multimode cabling with 24 fibers and LC connectors lengths up to 100 meters. These are ultra-compact cables with uniboot connectors for the smallest possible fanout.

The most requested lengths are also available in MTP / MPO trunk cables up to 100 meters.
This range includes cables with 1,2 or 4 MTP / MPO connectors per side in both polarity A as B in Multimode.

24 fibers preterm OS2 indoor, with LC polarity twist connectors

Colour	3m	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m	60m	70m	80m	90m	100m
Yellow	DC5550	DC5551	DC5552	DC5553	DC5554	DC5555	DC5556	DC5557	DC5558	DC5559	DC5560	DC5561	DC5562	DC5563	DC5564	DC5565

24 fibers preterm OM4 (OM3) indoor, with LC polarity twist connectors

Colour	3m	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m	60m	70m	80m	90m	100m
Erika Violet	DC5500	DC5501	DC5502	DC5503	DC5504	DC5505	DC5506	DC5507	DC5508	DC5509	DC5510	DC5511	DC5512	DC5513	DC5514	DC5515

1x 12 fibers trunkcable OM4 (OM3), with 1x MTP/MPO connector each side

Colour	25m	30m	35m	40m	45m	50m	60m	70m	80m	90m	100m
Polarity A											
Erika Violet	DC5000	DC5001	DC5002	DC5003	DC5004	DC5005	DC5006	DC5007	DC5008	DC5009	DC5010
Polarity B											
Erika Violet	DC5020	DC5021	DC5022	DC5023	DC5024	DC5025	DC5026	DC5027	DC5028	DC5029	DC5030

2x 12 fibers trunkcable OM4 (OM3), with 2x MTP/MPO connectors each side

Colour	5m	7m	10m	12m	15m	20m	25m	30m	35m	40m	45m	50m	60m	70m	80m	90m	100m
Polarity A																	
Erika Violet	DC5200	DC5201	DC5202	DC5203	DC5204	DC5205	DC5206	DC5207	DC5208	DC5209	DC5210	DC5211	DC5212	DC5213	DC5214	DC5215	DC5216
Polarity B																	
Erika Violet	DC5250	DC5251	DC5252	DC5253	DC5254	DC5255	DC5256	DC5257	DC5258	DC5259	DC5260	DC5261	DC5262	DC5263	DC5264	DC5265	DC5266

4x 12 fibers trunkcable OM4 (OM3), with 4x MTP/MPO connectors each side

Colour	5m	7m	10m	12m	15m	20m	25m	30m	35m	40m	45m	50m	60m	70m	80m	90m	100m
Polarity A																	
Erika Violet	DC5400	DC5401	DC5402	DC5403	DC5404	DC5405	DC5406	DC5407	DC5408	DC5409	DC5410	DC5411	DC5412	DC5413	DC5414	DC5415	DC5416
Polarity B																	
Erika Violet	DC5450	DC5451	DC5452	DC5453	DC5454	DC5455	DC5456	DC5457	DC5458	DC5459	DC5460	DC5461	DC5462	DC5463	DC5464	DC5465	DC5466

Preterm cables: preterminated fiber optic installation cables on stock. ACT preterm cables, which is short for preterminated cables, are fiber optic installation cables with connectors already attached. No tooling is required for the installation.

ACT preterm cables are available in the following variants:
*   4/8 fibers and LC connectors suited for indoor / outdoor use.
*   24 fibers and LC polarity twist connectors indoor cables for datacenter applications.
*   12/24/48 fibers and MTP/MPO connectors indoor cables for datacenter applications.

Our ACT preterm cables are available from stock so you can start your installation right away. The last two variants are for datacenters applications. What does this mean and why are these cables so suited for datacenters? Read the rest of this article to find out.

Suitable for point-to-point and structured cabling
ACT fiber optic preterm cables are suitable for both point-to-point and structured cabling. Point-to-point cabling means that equipment is directly connected to each other.

Structured cabling, also called fixed cabling, involves the use of panels, installation and patch cabling. By using a staggered fanout, the preterm fiber optic cables are easy to connect to both patch panels and equipment such as switches, servers and storage.

ACT preterm fiber optic installation cables: flexible, scalable and suitable for fast MAC (Moves, Adds and Changes)
When designing a cabling system in a datacenter, flexibility and scalability are of great importance. In datacenters and server rooms Moves, Adds and Changes regularly take place. The use of preterm fiber optic installation cables is an excellent solution due to its compact size and polarity twist connectors.

Polarity twist connectors
ACT preterm cables with 24 fibers and polarity twist connectors
By choosing for ACT preterm cables with 24 fibers your datacenter is future proof. The preterm fiber optic cables are equipped with LC polarity twist connectors.

Polarity twist connectors offer several advantages:
• The polarity of the two fibers can be adjusted within seconds. You achieve this by twisting the outside of the connector.
• Reducing the number of fanout cables by half.
• Thinner fanout cables, 2mm instead of 3mm thick a saving of 33%.

In addition to the polarity twist connectors, our ACT fiber optic installation cables have a divisible cable gland. For direct connection of equipment, point-to-point, in most cases no cable gland is needed. In 19″ panels, however, a cable gland is often used to fix fiber optic cable. With the divisible cable gland you can easily add a cable gland.

A diameter of 6.5mm and the fanouts of 2mm make the installation cable compact and robust

1. Press both sides to unlock the triger module

2. Remove the triger module direction front

3. Flip the connector module upside down and gray dots are facing down

4. Put the trigger back until you hear a "CLICK"

Advantages Polarity Twist Patch Cables:
- 60% thinner patch cables
- Better airflow
- Flexible solution
- Saves Valuable Space
- Saves time
- Easier cable management
- Change polarity fast

Save space with preterms: Up to 50% more capacity thanks to ultra compact cable
Due to their small diameter, ACT preterm cables are suitable for high density connections in datacenters and server rooms. Because of our design of ultra compact cables with thin diameter, you can put up to 50% more cables in the fiber raceway / cableduct or in your 19″ cabinet. This provides better scalability and flexibility for future network expansions.

Use of ultra compact ACT fiber optic cables in a datacenter

Fiber optic connecting hardware assortment

Fiber panels

Fiber connector	OM3LC	OS2LC	OS2LC	OS2SC	Unloaded	Mounting holes
24 ports	FA2037	FA2036	FA2039	FA2038	FA2044	FA2016

Fiber mounting unloaded

Number of ports	8 ports	16 ports	12 ports DIN RAIL	2 ports	2 ports incl. pigtails
24 ports	FA2033	FA2034	FA2043	FA2032	FA2031

Casette

1/12	2/24	1/12	2/24	1/12	2/24	6/0
OM3	OM3	OM4	OM4	OS2	OS2	ALL
FA2018	FA2019	FA2020	FA2021	FA2024	FA2025	FA2046

Fiber optic adapters

Type no.	OM1	OM2	OM3	OM4	OM5	OS1/2	OS1/2 APC	Metal
LC-LC duplex square		EA9002						
LC-LC duplex flange	EA1005	EA1005	EA9005	EA9006	EA1016	EA1004	EA9007	
LC-LC quad flange	EA1018	EA1018	EA9008	EA9009	EA1019	EA1020	EA1021	
SC-SC simplex flange	EA1023	EA1023	EA1024	EA1025	EA1026	EA2003	EA3005	
SC-SC duplex flange	EA1006	EA1006	EA3003	EA3004	EA1027	EA3002	EA1028	
ST-ST simplex round								EA1001
ST-ST simplex flange								EA2004
LC-SC simplex flange								EA8001
SC-ST simplex flange	EA1036	EA1036	EA1036	EA1036	EA1036	EA1036		
SC-ST duplex flange	EA2002	EA2002	EA2002	EA2002	EA2002	EA2002		
LC-ST simplex flange								EA1040
LC-FC simplex flange	EA1041	EA1041	EA1041	EA1041	EA1041	EA1041		
SC-FC simplex flange	EA1042	EA1042	EA1042	EA1042	EA1042	EA1042		

Pigtails

Type no.	OM3	OM4	OS2
LC 50/125µM	RL9695		
LC 50/125µM		RL3795	
LC 9/125µM			RL9995

Fiber optic attenuators

Attenuation	1dB	2dB	3dB	5dB	7dB	10dB	15dB
SC	EA4001	EA4002	EA4003	EA4005	EA4007	EA4010	EA4015
LC	EA4021	EA4022	EA4023	EA4025	EA4027	EA4030	EA4035

Fiber optic tools

Fiber optic cable tester	CX1007
Fiber optic microscope	CX1008

Use ACT Fiber optic cleaners for the best performance

In order to get the best performance out of our fiber optic network we advise to always clean the ferrule tips of the connectors. Cleaning fibers is essential for an optimal connection as dirt can block the path of light and damages connectors and equipment. With the increase in network speeds we see that the cleaning of fibers is essential in order to prevent failures and degraded performances.

The greatest cause of link failures are issues with connector contamination. This is reported by 98% of installers and 80% of network owners in a study by NTT-Advanced Technology. Cleaning a fiber reduces the chance of contaminating another optical interface or expensive fiber optic equipment.

Cleaners for fiber cables

ACT advises to inspect and clean all connectors before they are plugged into connectors or equipment, this also applies to new cables. It is not necessary to periodically clean connectors that are already mated.

We offer two kind of ACT cleaners for fiber cables, a reel cleaner and one click cleaner. The advantage of a reel cleaner is the possibility to clean connectors with different ferrule sizes. The advantage of a one click cleaner is the possibility to clean both connectors and bulkheads (adapters). They are easy to use, minimizing the risk of clean mistakes.

By cleaning fiber connectors the transceivers will not get dirty either. When they do, we advise to use cleaning sticks. Cleaning sticks have the lowest chance of damaging your equipment.

*One click cleaner
type no.: EA9912*
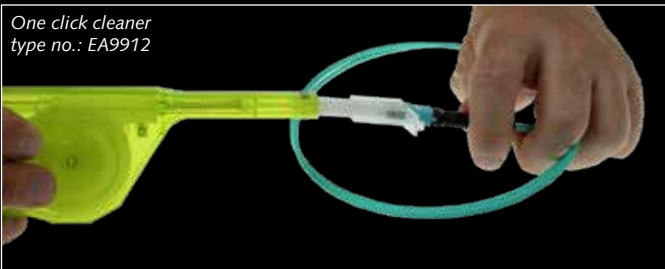
*One click cleaner
type no.: EA9910*
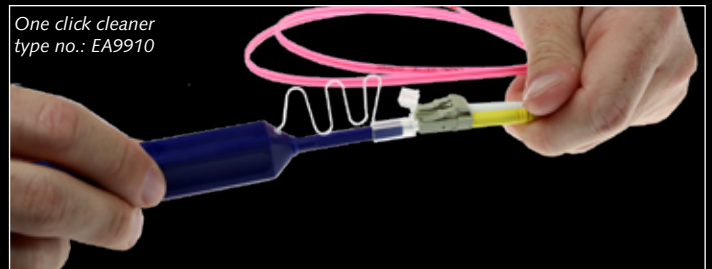
Fiber optic cleaners

Type no.	LC/MU	SC/ST/FC/E2000	MPO/MT
One click cleaner	EA9910	EA9911	EA9912
Cleaning sticks	EA9904	EA9905	
Reel Cleaner	EA9901	EA9901	EA9901
Spare reel	EA9902	EA9902	EA9902

We help you find the right cable in 5 steps

The right fiber optic patch cable is essential for a stable network. But how do you choose the right patch cable? What do you have to pay attention to? Which fiber optic patch cable is suitable for your application?

In the following 5 steps you will read what you need to know to find the correct cable.

1. **When do I use fiber optic patch cables?**
You use fiber optic patch cables for connecting active equipment. Fiber optic patch cables are usually used for patching in 19 ″cabinets. In some cases, you will also find fiber optic patch cables in cable trays to cover greater distances.

Fiber optic patch cables are also used as a connection to the fixed cabling. Fixed cabling (also known as installation cabling) can be cabling within a building but also outside cabling in, for example, a Fiber to the Home network.

2. **Which fiber optic patch cable do I choose?**
Below is an overview of the different types of fiber optic patch cables:
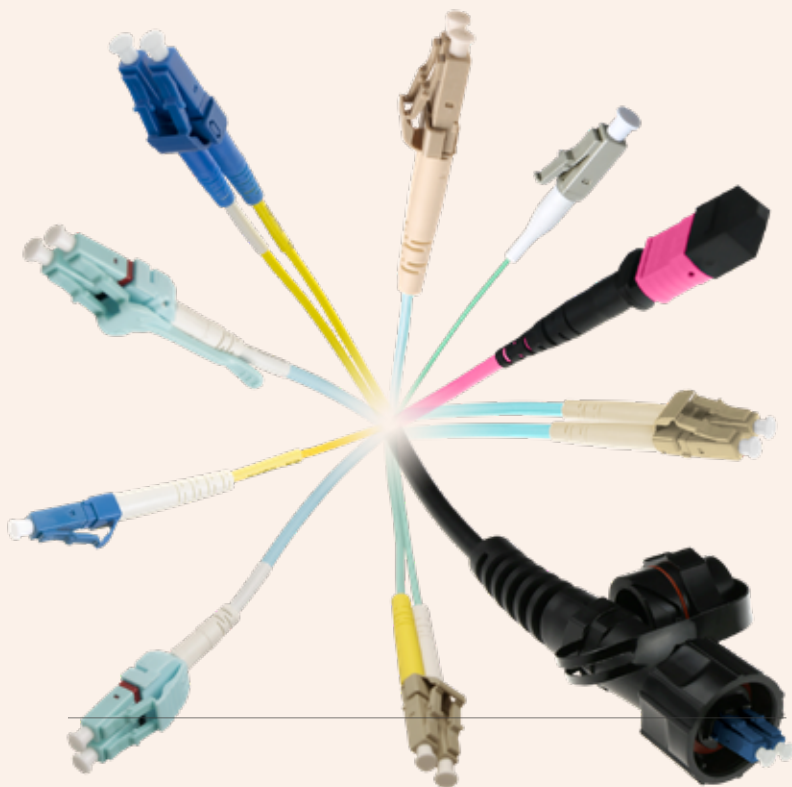
MTP / MPO patch cable
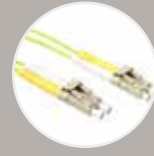
Duplex patch cable

Simplex patch cable

Polarity twist patch cable

Short boot patch cable
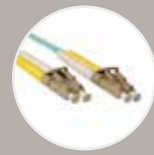
Ruggedized patch cable

Armored patch cable
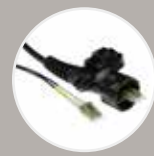
IP67 patch cable

Mode conditioning cable

3. Which quality attributes do I need to pay attention to

Based on the appearance of a cable you can't determine the quality. But how do you determine the quality of a fiber patch cable? There are a number of points that you should at least take into account in order to determine the quality.

Grades

Different degrees of quality have been established by the International Electrotechnical Commission (IEC). Grade A to Grade C. Grade A assures you of the best quality fibers and connectors. For professional applications where reliability is paramount, we recommend Grade A.

Test report

In addition, we advise you to opt for fiber optic cables that are equipped with an individual test report. This means that each fiber in the cable has been tested for how much light is attenuated.

This attenuation has a direct influence on the speed and reliability of your network. By opting for fiber optic patch cables with an individual test report, you are assured of a cable that has been tested and you know the attenuation values in your network.

Quality control in the production process

However fiber type and an individual test report do not tell the whole story. The production process and its quality control are of great importance. An incorrectly polished connector can reduce the optical performance of your connector within a short period of time after installation.

This is not visible in the test report because it is measured immediately after production. It can also occur with Grade A parts in case of errors in the production process.

If you choose a reputable brand, the chance of errors in your network is minimal.

ACT is a renowned brand and has built up a reputation over the years by delivering consistent quality. At ACT we are proud of this and we will do everything we can to continue to deliver high consistent quality. With ACT cables, you can be sure of this and you will notice it through a reliable network.

4. How is a fiber patch cable constructed?

A fiber patch cable is composed of the following elements:

- The fiber
- Primary and secondary coating: strengthens the fiber and makes it suitable for installation.
- Kevlar: the fiber is protected against tensile stress by the kevlar/aramid around the secondary coating.
- The outer jacket m (also called jacket): strengthens the construction and protects the cable against external influences.
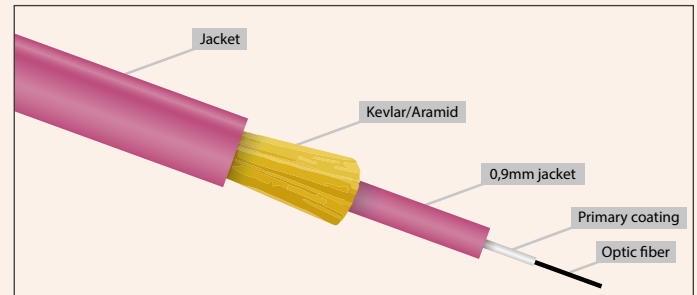
The most important characteristic of Kevlar is that it is very strong. Kevlar is used in bulletproof vests and high end speaker systems. Ideal for the protection of the fiber.

5. Which fibers and connectors are used in patch cables?

Fiber optic patch cables are available with different types of fibers and connectors.

Multimode fiber for short distances

Multimode fibers are used for short distances and have a LED or VCSEL as light source. These fibers are limited in length and speed. Several generations of multimode fibers are available, from OM1 to OM5.

Which variant you can use best depends on the application and whether you are going to expand an existing network. You will find more information in the table below.

Singlemode fiber for long distances

Singlemode fibers are used for longer distances and have almost infinite bandwidth. The light source of a single-mode fiber is a laser, which makes it more powerful and accurate, but also more expensive than a LED or VCSEL. In recent years, however, the price difference has been steadily decreasing, as a result of which single mode is increasingly being used for short distances as well.

See below an overview of different types of fiber:

Fiber type	OM1	OM2	OM3	OM4	OM5	OS2
			Multimode			Singlemode
	62,5/125µm		50/125µm			9/125µm
Distance						
Distance	2000 m	550 m	300 m	400 m	440 - 150 m	*
Used for	10/100 Mb/s	1 Gb/s	10 Gb/s	10 Gb/s	40-100 Gb/s	*

* The maximum length is related to the best suitable speed and depends on the transceiver.

Fiber optic cables ACT

MTP / MPO patch cable

If you want to make connections with high speeds (40G and more) an MTP|MPO patch cable is an excellent choice. The connector is able to connect 12 fibers at once over 1 compact cable. This cable is typically applied in situations where the bandwidth is high and the distance short, mostly up to 100 meters making this the high speed cable of choice in datacenters and server rooms. For lengths from 20 meters see our Trunk cables.

MTP/MPO to MTP/MPO patch cables

Colour	1m	2m	3m	5m	7m	10m	12m	15m	20m
OM3 Polarity A	RL7701	RL7702	RL7703	RL7705	RL7707	RL7710	RL7712	RL7715	RL7720
OM3 Polarity B	RL7721	RL7722	RL7723	RL7725	RL7727	RL7730	RL7732	RL7735	RL7740
OM4 Polarity A	RL7741	RL7742	RL7743	RL7745	RL7747	RL7750	RL7752	RL7755	RL7760
OM4 Polarity B	RL7761	RL7762	RL7763	RL7765	RL7767	RL7770	RL7772	RL7775	RL7780
OS2 Polarity A	RL7781	RL7782	RL7783	RL7785	RL7787	RL7790	RL7792	RL7795	RL7800

MTP/MPO to LC fanout cables

Colour	1m	2m	3m	5m
OM3 8 fibers	RL7821	RL7822	RL7823	RL7825
OM3 12 fibers	RL7831	RL7832	RL7833	RL7835
OM4 8 fibers	RL7841	RL7842	RL7843	RL7845
OM4 12 fibers	RL7851	RL7852	RL7853	RL7855
OS2 8 fibers	RL7861	RL7862	RL7863	RL7865
OS2 12 fibers	RL7871	RL7872	RL7873	RL7875

Duplex patch cable – Most commonly used

Duplex patch cables are the most commonly used patch cables. Duplex patch cables consist of two connected cables with one fiber per cable. The two cables can easily be seperated by zipping them apart, for this reason duplex patch cables are also known as zipcords. Duplex patch cables use one fiber for sending and one for receiving, enabling two way communication for applications like internet and interactive tv. Most of the following cables are modern variants of duplex patch cables with an improvement. This applies to uniboot (HD), short boot ruggedized and armored patch cables.

50/125μm OM5 Multimode patch cable LSZH

Colour	Connectors	0.5m	1m	1.5m	2m	3m	5m
Lime	LC-LC	RL5800	RL5801	RL5851	RL5802	RL5803	RL5805
Lime	LC-SC	RL5900	RL5901	RL5951	RL5902	RL5903	RL5905

50/125μm OM4 Multimode duplex patch cable LSZH

Colour	Connectors	0.25m	0.5m	1m	1.5m	2m	3m	5m	10m	15m	20m	25m	30m	50m
Erika violet	LC-LC	RL9752	RL9700	RL9701	RL9751	RL9702	RL9703	RL9705	RL9710	RL9715	RL9720	RL9725	RL9730	RL9750
Erika violet	LC-SC			RL8701	RL8751	RL8702	RL8703	RL8705	RL8710	RL8715	RL8720	RL8725	RL8730	RL8750
Erika violet	SC-SC			RL3701	RL3751	RL3702	RL3703	RL3705	RL3710	RL3715	RL3720		RL3730	RL3750

50/125μm OM3 Multimode duplex patch cable LSZH

Colour	Connectors	0.25m	0.50m	1m	1.5m	2m	2.5m	3m	4m	5m	7m	10m	15m	20m	25m	30m	50m
Aqua	LC-LC	RL9652	RL9600	RL9601	RL9651	RL9602	RL9653	RL9603	RL9604	RL9605	RL9607	RL9610	RL9615	RL9620	RL9625	RL9630	RL9650
Aqua	LC-SC		RL8600	RL8601	RL8651	RL8602		RL8603		RL8605	RL8607	RL8610	RL8615	RL8620		RL8630	RL8650
Aqua	LC-ST			RL7601	RL7651	RL7602		RL7603		RL7605	RL7607	RL7610		RL7620			
Aqua	SC-SC		RL3600	RL3601	RL3651	RL3602		RL3603		RL3605	RL3607	RL3610	RL3615	RL3620		RL3630	RL3650

50/125µm OM2 Multimode duplex patch cable LSZH

Colour	Connectors	0.50m	1m	1.5m	2m	3m	5m	10m	15m	20m	25m	30m	50m
Orange	LC-LC	RL9500	RL9501	RL9551	RL9502	RL9503	RL9505	RL9510	RL9515	RL9520	RL9525	RL9530	RL9550
Orange	LC-SC	RL8500	RL8501	RL8551	RL8502	RL8503	RL8505	RL8510	RL8515	RL8520		RL8530	RL8550
Orange	LC-ST		RL7501	RL7551	RL7502	RL7503	RL7505	RL7510	RL7515	RL7520		RL7530	RL7550
Orange	SC-SC	RL3500	RL3501	RL3551	RL3502	RL3503	RL3505	RL3510	RL3515	RL3520		RL3530	RL3550
Orange	SC-ST	RL2500	RL2501	RL2551	RL2502	RL2503	RL2505	RL2510	RL2515	RL2520		RL2530	RL2550
Orange	ST-ST	RL1500	RL1501	RL1551	RL1502	RL1503	RL1505	RL1510	RL1515	RL1520		RL1530	RL1550

62,5/125µM OM1 Multimode duplex patch cable LSZH

Colour	Connectors	0.50m	1m	1.5m	2m	3m	5m	10m	15m	20m	25m	30m	50m
Orange	LC-SC	RL8000	RL8001	RL8051	RL8002	RL8003	RL8005	RL8010	RL8015	RL8020		RL8030	
Orange	LC-LC	RL9000	RL9001	RL9051	RL9002	RL9003	RL9005	RL9010	RL9015	RL9020	RL9025	RL9030	RL9050
Orange	LC-ST		RL7001	RL7051	RL7002	RL7003	RL7005	RL7010	RL7015	RL7020		RL7030	RL7050
Orange	SC-SC	RL3000	RL3001	RL3051	RL3002	RL3003	RL3005	RL3010	RL3015	RL3020			RL3050
Orange	SC-ST	RL2000	RL2001	RL2051	RL2002	RL2003	RL2005	RL2010	RL2015	RL2020		RL2030	RL2050
Orange	ST-ST	RL1000	RL1001	RL1051	RL1002	RL1003	RL1005	RL1010	RL1015	RL1020		RL1030	RL1050

9/125µm OS2 Single mode duplex patch cable LSZH

Colour	Connectors	0.25m	0.5m	1m	1.5m	2m	2,5m	3m	4m	5m	7m	10m	15m	20m	25m	30m	50m
Yellow	LC-LC	RL9952	RL9900	RL9901	RL9951	RL9902	RL9953	RL9903	RL9904	RL9905	RL9907	RL9910	RL9915	RL9920	RL9925	RL9930	RL9950
Yellow	LC-SC		RL8900	RL8901	RL8951	RL8902		RL8903		RL8905	RL8907	RL8910	RL8915	RL8920	RL8925	RL8930	RL8950
Yellow	LC-ST			RL7901	RL7951	RL7902		RL7903		RL7905		RL7910	RL7915	RL7920		RL7930	RL7950
Yellow	SC-SC		RL3900	RL3901	RL3951	RL3902		RL3903		RL3905		RL3910	RL3915	RL3920		RL3930	RL3950
Yellow	SC-ST			RL2901	RL2951	RL2902		RL2903		RL2905		RL2910	RL2915	RL2920			
Yellow	LC/APC-LC/APC		RL2600	RL2601	RL2651	RL2602		RL2603		RL2605		RL2610		RL2620			
Yellow	LC/APC-SC/APC			RL2701		RL2702		RL2703		RL2705		RL2710					
Yellow	LC/APC-LC/UPC			RL2801		RL2802		RL2803		RL2805		RL2810					
Yellow	SC/APC8-LC/PC		RL8800	RL8801	RL8851	RL8802		RL8803		RL8805		RL8810	RL8815	RL8820	RL8825	RL8830	RL8850
Yellow	SC/APC8-SC/PC		RL3800	RL3801		RL3802		RL3803		RL3805		RL3810	RL3815	RL3820	RL3825	RL3830	RL3850
Yellow	SC/APC8-SC/APC8		RL1600	RL1601		RL1602		RL1603		RL1605		RL1610	RL1615	RL1620			
Yellow	E2000/APC-SC/UPC			RL3101		RL3102		RL3103		RL3105	RL3107	RL3110					
Yellow	E2000/APC-LC/UPC			RL3201		RL3202		RL3203		RL3205	RL3207	RL3210					

Simplex patch cable – sending and receiving over a single fiber

You can cut your need of the fibers/cables in half by using simplex patch cables. This works with fiber optic modules that enable two way communication over one fiber. These kind of patch cables are used a lot in FTTH applications for minimizing the usage of fibers. Simplex patch cables are only available in Singlemode and not in Multimode.

9/125µm OS2 single mode simplex patch cable LSZH

Colour	Connectors	0.5m	1m	1.5m	2m	3m
Yellow	LC-LC	RL9990	RL9991	RL9999	RL9992	RL9993

Short boot patch cable – When space is limited

When you have limited space for the connector because of a small housing or short distance between the panel and door of a 19″ cabinet short boot patch cables are a great solution. Short boot differs from duplex patch cables by having a shorter boot on the connector.

9/125µm OS2 Single mode duplex patch cable LSZH												
Colour	Connectors	0.5m	1m	2m	3m	5m	10m	15m	20m	25m	30m	50m
Yellow	LC-LC short boot	RL1700	RL1701	RL1702	RL1703	RL1705	RL1710	RL1715	RL1720	RL1725	RL1730	RL1750
Yellow	LC short boot -SC	RL1800	RL1801	RL1802	RL1803	RL1805	RL1810	RL1815	RL1820	RL1825	RL1830	RL1850

Polarity Twist patch cables - For high density panels and easy cable management

Polarity Twist cables can change the polarity within seconds and save 60% on cabling volume compared to regular patch cables. This makes Polarity Twist cables the best solution for high density applications and the reduction on cable volume makes cable management easier.

50/125µm OM3 Polarity Twist patch cable LSZH

Colour	Connectors	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	12m	15m	17m	20m	22m	25m	27m	30m
Aqua	LC-LC	RL8352	RL8300	RL8301	RL8351	RL8302	RL8303	RL8305	RL8307	RL8310	RL8312	RL8315	RL8317	RL8320	RL8322	RL8325	RL8337	RL8330

50/125µm OM4 Polarity Twist patch cable LSZH

Colour	Connectors	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	12m	15m	17m	20m	22m	25m	27m	30m
Erika violet	LC-LC	RL8452	RL8400	RL8401	RL8451	RL8402	RL8403	RL8405	RL8407	RL8410	RL8412	RL8415	RL8417	RL8420	RL8422	RL8425	RL8427	RL8430

9/125µm OS2 G657A Polarity Twist patch cable LSZH

Colour	Connectors	0.25m	0.5m	1m	1.5m	2m	3m	5m	7m	10m	12m	15m	17m	20m	22m	25m	27m	30m
Yellow	LC-LC	RL8252	RL8200	RL8201	RL8251	RL8202	RL8203	RL8205	RL8207	RL8210	RL8212	RL8215	RL8217	RL8220	RL8222	RL8225	RL8227	RL8230

Ruggedized patch cable – better mechanical protection

You can use ruggedized patch cables for longer distances, 10 meter or more. Normal patch cables are suited for short distances within a 19" cabinet. Ruggedized patch cables have an extra jacket for improved mechanical protection.

50/125μm OM3 Duplex ruggedized fiber optic patch cable LSZH

Colour	Connectors	10m	20m	30m	40m	50m
Aqua	LC-LC	RL5101	RL5102	RL5103	RL5104	RL5105
Aqua	LC-SC	RL5201	RL5202	RL5203	RL5204	RL5205
Aqua	SC-SC	RL5301	RL5302	RL5303	RL5304	RL5305

9/125μm OS2 duplex ruggedized fiber optic patch cable LSZH

Colour	Connectors	10m	20m	30m	40m	50m
Yellow	LC-LC	RL5401	RL5402	RL5403	RL5404	RL5405
Yellow	LC-SC	RL5601	RL5602	RL5603	RL5604	RL5605
Yellow	SC-SC	RL5701	RL5702	RL5703	RL5704	RL5705

Armored patch cable – the best mechanical protection

When your patch cables are exposed to extreme conditions in harsh environments you can chose armored patch cables. These are patch cables with a metal armor offering the best protection. This type of patch cable is commonly used in industrial or offshore environments.

9/125μm OS2 duplex armored fiber patch cable

Colour	Connectors	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m	25m	30m	40m	50m
Yellow	LC-LC	RL3300	RL3301	RL3351	RL3302	RL3303	RL3305	RL3307	RL3310	RL3315	RL3320	RL3325	RL3330	RL3340	RL3350

50/125μm OM3 duplex armored fiber patch cable

Colour	Connectors	0.5m	1m	1.5m	2m	3m	5m	7m	10m	15m	20m	25m	30m	40m	50m
Aqua	LC-LC	RL3400	RL3401	RL3451	RL3402	RL3403	RL3405	RL3407	RL3410	RL3415	RL3420	RL3425	RL3430	RL3440	RL3450

IP67 patch cable

For outside use there are patch cables with an extra housing for IP67 water- and dust resistance. These cables are commonly used for connecting antenna's in mobile base stations to ground cabling for wireless applications like wifi and mobile internet.

OM3

Colour	Connectors	1m	2m	5m	10m	15m	20m	30m	40m	50m
Black	LC(IP67)-LC	RL7101	RL7102	RL7105	RL7110	RL7115	RL7120	RL7130	RL7140	RL7150

OM3

Colour	Connectors	1m	2m	5m	10m	15m	20m	30m	40m	50m
Black	LC(IP67)-LC (IP67)	RL7201	RL7202	RL7205	RL7210	RL7215	RL7220	RL7230	RL7240	RL7250

OS2

Colour	Connectors	1m	2m	5m	10m	15m	20m	30m	40m	50m
Black	LC(IP67)-LC	RL7301	RL7302	RL7305	RL7310	RL7315	RL7320	RL7330	RL7340	RL7350

OS2

Colour	Connectors	1m	2m	5m	10m	15m	20m	30m	40m	50m
Black	LC(IP67)-LC (IP67)	RL7401	RL7402	RL7405	RL7410	RL7415	RL7420	RL7430	RL7440	RL7450

Mode conditioning cable

• Applied by Single Mode Gigabit ethernet equipment over Multimode installed fiber optic cabling.
• Developed for Longwave (-LX) Multi Mode applications for Gigabit ethernet in accordance with IEEE-802.3Z.
• Masks Differential Mode Delay (DMD) signal quality reduction.

Mode conditioning 2x LC 50/125 µm - 1x LC 50/125 µm + 1x LC 9/125 µm patch cable

Colour		Connectors	2m
Yellow	Aqua	LC-LC	RL9998

Video

Video cables

ACT offers a wide range of professional video cables (with full copper conductor) such as: DisplayPort, HDMI, VGA, DVI and USB adapters/converters. Below you can find an overview of the ACT video cables.

For each type of cable you can easily find the length you are looking for (including the item number). Please contact us if you can't find the cable or the length that you are looking for. We will assist you in finding the right solution.

VIDEO

What is the best video cable solution for my set up?

Introduction of video cables:
- HDMI (High-Definition Multimedia Interface)
- DisplayPort
- DVI (Digital Visual Interface)
- VGA (Video Graphics Array)

Quick summary:

HDMI is the most common video cable and supports video and audio over a single cable, including 8K video resolutions. It defines todays standard for all kind of modern Audio/Video systems.
The recommended cable length for HDMI is 5 meter, with an exception for HDMI premium certified and hybrid AOC cables. DisplayPort is the latest video interface and offers a higher level then HDMI, including 8K resolutions and higher. DisplayPort is compatible with many display connections, making it the universal AV video source connection. With simple adapters it's even backward compatible with HDMI, VGA and DVI. For DisplyPort we advise a maximum cable length of 3 meter.

VGA is the oldest video interface and suitable for analogue signals, perfect for older monitor systems. The maximum length recommended for VGA cables is 15 meter. Compared to VGA, the DVI connection is more versatile. Its convertible to both VGA and HDMI when using suitable adapters. Providing a digital signal for better video quality and due to higher bandwidth, it can achieve maximum resolutions of 2560 × 1600 at 60Hz using DVI Dual Link. Cable lengths up to 5m will work for display resolutions up to 1920 × 1200.

HDMI v2.0 is recommended when a 4K@60Hz resolution needs to be supported. It also supports HDR: High Dynamic Range. HDR provides higher contrast, rich colors, deep black value and more intense white tones. To ensure the highest 4K@60Hz quality a premium certified cable approved by the HDMI.org is a good option.

For certain business solutions we advise using a lockable HDMI cable to prevent signal loss from the device. Combining this feature with a HDMI premium certified cable provides the most secured business solution.

Hybrid Active Optical Cables (AOC cable) are equipped with fiber and copper conductors. The cable is lighter and more flexible. Which makes it perfect for installation where space is limited and longer distances need to be covered.
Normally the maximum advised distance is around 5 meters, with an AOC cable it is possible to cover a length of 100m. With resolutions up to 8K@60Hz without any signal loss. In terms of installation this cable excels. It can be equipped with a Mini HDMI or Mini DP connector, including draw bar eye, which makes it much easier to guide the cable through holes or pipes. In the end, simply add an adapter to make it full size again. A proper solution to use for conference rooms, classrooms, displays and more.
HDMI v2.1 is the latest HDMI version and features the highest specifications. This version increases the overall data rate to 48Gb/s, supporting resolutions up to 8K@60Hz and 4K@120Hz. HDMI 2.1 is labeled as Ultra HDMI High Speed and the best option to get the most out of 8K or 4K HDMI video equipment.

HDMI
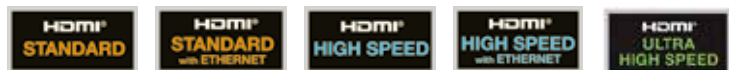
Let's start with HDMI, the most common video cable used in the market. You can find it in al modern TVs, monitors, and graphics cards. Compared to the other types of video cables, HDMI is the most common interface for TV.

HDMI is available in many versions, the most common are 1.4 and 2.0 HDMI High Speed. The latest version is v2.1, HDMI Ultra High Speed. To ensure the best quality an HDMI premium certified cable is recommended. This cable is certified and approved by the HDMI.org standard, which assures you of an optimal quality.

For non UHD displays the best, cost saving, option will be an HDMI 1.4 cable with a max resolution of 2560 x 1600 at 75Hz as well as 1920 x 1080 at 144Hz. These resolutions are very popular amongst online competitive PC gamers. 4K resolutions are still supported with a max refresh rate of 30Hz.

HDMI v1.4 also supports HDMI-CEC. This protocol gives possibilities to let devices communicate with each other. For example, a complete home cinema set with speakers and TV can be powered by switching on the Blu-ray player.

DisplayPort
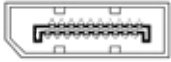
You can find DisplayPort in most of the modern monitors. Just like HDMI there are different versions, the most common one is DP 1.2. The maximum supported resolution for DP 1.2 is 4K at 60Hz. This is mandatory for gaming monitors that support Nvidia G-Sync or AMD Free Sync. In case of NVIDIA G-Sync, DisplayPort is required.

One of the main advantages of DisplayPort is the ability of multiple video streams (MST) through daisy-chaining. You can recognize daisy-chaining when the monitor has both an input and output DisplayPort. Connect the first monitor to the computer and the second monitor to the first monitor. If both the monitor and the computer support MST daisy-chaining, the two screens work as separate screens.

As we mentioned earlier, on TV screens you will mostly find HDMI connections. In case you want to connect your device with a DisplayPort source to your TV, there is the possibility to connect an HDMI to DisplayPort converter cable.

DisplayPort version 1.4, adds support for HDR10 as well as 8K@60Hz and 4K@120Hz by using DSC (Display Stream Compression) encoding with 3:1 compression ratio. As mentioned before, HDMI, as well as DisplayPort support Hybrid AOC, covering much longer distances then standard specified without any signal loss.

DVI

DVI-A   DVI-I (Single Link)   DVI-I (Dual Link)   DVI-D (Single Link)   DVI-D (Dual Link)

The DVI interface is designed to transmit uncompressed digital video and can be configured to support multiple modes such as DVI-A (analog only), DVI-D (digital only) or DVI-I (digital and analog). Dual link DVI adds six pins, at the center of the connector, increasing the bandwidth and supporting resolutions up to 2560 × 1600 at 60 Hz. A connector with these additional pins is sometimes referred to as DVI-DL (dual link)

The main advantage of the DVI port is the fact that it is quite versatile, meaning it's convertible to both VGA and HDMI by using suitable adapters.

VGA

Compared to the other mentioned video interfaces, VGA cannot keep up, simply because it can only transmit analogue video signals. For older computer systems and monitors it's still possible to choose VGA with maximum resolutions of 1920 x 1200 at 60Hz. The maximum recommended length for VGA cables is 15 meter.

Video cables

DisplayPort cable

Colour	Description	Resolution	0.5m	1m	2m	3m	5m
Black	DP male-DP male (Power Pin 20 connected) | 1.2	4k@60Hz	AK3977	AK3978	AK3980	AK3981	AK3982
Black	DP male-DP male (Power Pin 20 not connected) | 1.2	4k@60Hz	AK3975	AK3976	AK3983	AK3984	AK3986
Black	DP male-DisplayPort male | 1.4	8K@60Hz		AK4071	AK4073	AK4074	
Black	DP male-DisplayPort male | 1.4	8K@60Hz		AC4071*	AC4073*	AC4074*	

*Metal connector housing

Hybrid AOC (Active Optical Cable)

Hybrid AOC (Active Optical Cable) is equipped with fiber and copper conductors which makes the cable lighter and more flexible.
Hybrid cables are perfect for installations with limited space and cover longer distances.
While normally the maximum advised distance is 5 meters, you can easily reach 100m with this type of cable.

A proper solution to use for conference rooms, classrooms, Home Theater, HD Video Surveillance, Medical video equipment and more.

DisplayPort hybrid cable \| 1.2

Colour	Description	Resolution	10m	15m	20m	30m	40m	50m	60m	70m	80m	90m	100m
Black	DP male-DP male	4K@60Hz	AK4030	AK4031	AK4032	AK4033	AK4034	AK4035	AK4036	AK4037	AK4038	AK4039	AK4040

Hybrid DisplayPort cables, made of copper and fiber optic strands, for connecting devices over long distances up to 100 m.

DisplayPort converter adapter/cables

Colour	Description	Resolution	Adapter	0.15m	0.5m	1m	1.8m	2m	3m	5m
Black	DP male-HDMI-A female	4k@60Hz	AB3985							
Black	DP male-HDMI-A female	4k@30Hz		AK3994						
Black	DP male-HDMI-A male	4k@30Hz			AK3987	AK3988	AK3990		AK3991	AK3992
Black	DP male-DVI female		AB3995							
Black	DP male-DVI female			AK3985						
Black	DP male-DVI male				AK3989	AK3993	AK3995		AK3997	AK3998
Black	DP male-VGA female			AK3996						
Black	DP male-VGA male							AK3999		

Conversion adapter mini DisplayPort \| 1.2

Colour	Description	Resolution	Adapter
White	Mini DP male-DP female	4k@60Hz	AB3996
Black	Mini DP female-DP male	4k@60Hz	AB3997

Mini DisplayPort adapter / cable

Colour	Description	Resolution	0.15m	0.5m	1m	1.5m	2m	3m	5m
White	Mini DP male-HDMI-A female	1080@60Hz	AK4000						
White	Mini DP male-Mini DP male | 1.2	4K@60Hz		AK3954	AK3959	AK3960	AK3961	AK3962	AK3969
White	Mini DP male-Mini DP female | 1.1	4K@30Hz			AK3955	AK3956		AK3958	
White	Mini DP male-DP male | 1.2	4K@60Hz		AK3968	AK3963	AK3964	AK3965	AK3966	AK3967
White	Mini DP male-DVI-D female single link	1080@30Hz	AK4001						
White	Mini DP male-VGA female	1080@30Hz	AK4002						

DisplayPort extender over CAT \| 1.2

Colour	Description	Resolution	70m
Black	DP female - DP female v1.2, over CAT6a	4K@30Hz	AC7770

HDMI versie	1.0	1.1	1.2-1.2a	1.3-1.3a	1.4-1.4b	2.0-2.0b	2.1
	HDMI standard	HDMI standard	HDMI standard	HDMI standard	HDMI High speed with ethernet	HDMI High speed with ethernet	HDMI Ultra High Speed
SD-video	✓	✓	✓	✓	✓	✓	✓
720p / 1080i	✓	✓	✓	✓	✓	✓	✓
1080p	✓	✓	✓	✓	✓	✓	✓
Dolby Digital	✓	✓	✓	✓	✓	✓	✓
DTS	✓	✓	✓	✓	✓	✓	✓
8-kanaals-PCM, 192kHz / 24 bit	✓	✓	✓	✓	✓	✓	✓
Consumer Electronics Control (CEC)	✓	✓	✓	✓	✓	✓	✓
DVD-audio	-	✓	✓	✓	✓	✓	✓
SACD (DSD)	-	-	✓	✓	✓	✓	✓
Deep color	-	-	-	✓	✓	✓	✓
Enhanced Color Space	-	-	-	✓	✓	✓	✓
Dolby True-HD	-	-	-	✓	✓	✓	✓
DTS-HD Master Audio	-	-	-	✓	✓	✓	✓
Auto Lip-Sync	-	-	-	✓	✓	✓	✓
HDMI Mini connector (Type-C)	-	-	-	✓	✓	✓	✓
3D (Frame Packing)	-	-	-	-	✓	✓	✓
4K @ 24/30Hz	-	-	-	-	✓	✓	✓
HDMI Micro Connector (Type D)	-	-	-	-	✓	✓	✓
Ethernet-channel (100 Mbit/s)	-	-	-	-	✓	✓	✓
Audio Return Channel (ARC)	-	-	-	-	✓	✓	✓
Static HDR (HDR10/HLG)	-	-	-	-	-	✓	✓
Updated list of CEC commands (CEC Extensions)	-	-	-	-	-	✓	✓
1080p @ 120Hz	-	-	-	-	-	✓	✓
4K @ 50/60Hz	-	-	-	-	-	✓	✓
4K @ 120Hz	-	-	-	-	-	-	✓
8K	-	-	-	-	-	-	✓
Dynamic HDR-format (Dolby Vision)	-	-	-	-	-	-	✓
Enhanced Audio Return Channel (eARC)	-	-	-	-	-	-	✓
Variable Refreshrate (VRR)	-	-	-	-	-	-	✓
Quick Media Switching (QMS)	-	-	-	-	-	-	✓
Quick Frame Transport (QFT)	-	-	-	-	-	-	✓
Automatic Low-latency-Mode (ALLM)	-	-	-	-	-	-	✓
VESA DSC 1.2a	-	-	-	-	-	-	✓

HDMI Ultra high speed cable | 2.1

Colour	Description	Resolution	1m	1.5m	2m	3m
Black	HDMI-A male-HDMI-A male	8K@60Hz	AK3907	AK3908	AK3909	AK3910
Black	HDMI-A male-HDMI-A male	8K@60Hz			AC3909*	

* Metal connector housing

HDMI High Speed premium certified cable | 2.0

Colour	Description	Resolution	0.5m	1m	1.5m	2m	3m	5m	6.10m
Black	HDMI-A male-HDMI-A male	4k@60Hz	AK3941	AK3942	AK3943	AK3944	AK3945	AK3946	AK3947

HDMI High Speed premium certified cable | 2.0, locking cable

Colour	Description	Resolution	0.5m	1m	1.5m	2m	3m	5m	6.10m
Black	HDMI-A male-HDMI-A male, locking cable	4K@60Hz		AK3861		AK3862	AK3863		

HDMI high speed cable | 2.0

Colour	Description	Resolution	0.5m	1m	2m	3m	5m	7m
Black	HDMI-A male-HDMI-A male	4k@60Hz	AK3900	AK3901	AK3902	AK3903	AK3904	AK3905
Black	HDMI-A male-HDMI-A male	4k@60Hz	AK3749	AK3755	AK3750	AK3751	AK3752	
Black	HDMI-A male-HDMI-A male angled	4k@60Hz	AK3675	AK3676	AK3678	AK3679		

Video cables

HDMI cable SLAC (super low attenuation cable) | 1.4

Colour	Description	Resolution	7m	10m	15m	20m
Black	HDMI-A male-HDMI-A male	4k@30Hz	AK3753			
Black	HDMI-A male-HDMI-A male	4k@30Hz		AK3754	Ak3756	
Blue	HDMI-A male-HDMI-A male	4k@30Hz		AK3804	AK3805	AK3806

HDMI Premium Hybrid cable

Colour	Description	Resolution	10m	15m	20m	25m	30m	40m	50m	60m	70m	80m	90m	100m
Black	HDMI-A male-HDMI-A male	2.0	4k@60Hz	AK3930	AK3931	AK3932	AK3929	AK3933	AK3934	AK3935	AK3936	AK3937	AK3938	AK3939	AK3940
Black	HDMI-A male-HDMI-A male	2.1	8k@60Hz	AK4120	AK4121	AK4122	AK4123	AK4124	AK4125	AK4126	AK4127	AK4128	AK4129	AK4130	AK4131

Hybrid HDMI cables, made of copper and fiber optic strands, for connecting devices over long distances up to 100 m.

HDMI Hybrid cable | 2.0

Colour	Description	Resolution	10m	15m	20m
Black	HDMI-A male-HDMI-A male	4K@60Hz	AK4117	AK4118	AK4119

Hybrid HDMI cables, made of copper and fiber optic strands, for connecting devices over long distances up to 20 m.

HDMI high speed cable | 1.4

Colour	Description	Resolution	0.5m	1m	1,5m	2m	3m
Black	HDMI-A male-HDMI-A male	4K@30Hz	AK3789	AK3790	AK3791	AK3792	AK3793
Black	HDMI-A male-HDMI-C male	4K@30Hz				AK3757	

HDMI high speed cable fully shielded | 1.4

Colour	Description	Resolution						
Black	HDMI-A male-HDMI-A male	4K@30Hz	AK3813	AK3814	AK3815	AK3816	AK3817	AK3818
Black	HDMI-A male-HDMI-D male	4K@30Hz				AK3798		

HDMI high speed slimline cable | 1.4

Colour	Description	Resolution	0.5m	1m	2m
Black	HDMI-A male-HDMI-C male	4K@30Hz	AK3670	AK3671	AK3673

HDMI adapter

Colour	Description	Fully shielded	Unshielded
Black	HDMI-A male-female flex		AB3769
Black	HDMI-A female-female flex		AB3770
Black	HDMI-A male-female down		AB3771
Black	HDMI-A male-female left		AB3775
Black	HDMI female female straight	AB3768	AP1005

HDMI extender over CAT | 1.4

Colour	Description	Resolution	50m*	60m*	100m*
Black	HDMI-A male-HDMI-A male, extender set	1080@60Hz	AC7800		
Black	HDMI-A male-HDMI-A male, HDMI over IP extender set, with IR support	1080@60Hz		AC7810	
Black	HDMI-A male-HDMI-A male, HDMI over IP extender set	1080@60Hz			AC7850
Black	HDMI-A male-HDMI-A male, HDMI over IP receiver	1080@60Hz			AC7851
Black	HDMI-A male-HDMI-A male, 4k extender set	4k@30Hz			AC7870
Black	HDMI-A male-HDMI-A male, 4K chainable receiver	4k@30Hz			AC7871**

*The specified CAT cable length is the maximum distance which can be realized via good quality CAT cable. We advice to use CAT6 cable.

**AC7871 Supports daisy chaining up to 250 displays, max. distance 2.5km. Can only be used in combination with AC7870 set

HDMI splitter | 1.4

Colour	Description	Resolution	Type no.
Black	Input: 1x HDMI-A female, Output: 4x HDMI-A female	4K@30Hz	AC7830

HDMI switch | 1.4

Colour	Description	Resolution	Type no.
Black	Input: 5x HDMI-A female, Output: 1x HDMI-A female	4K@30Hz	AC7840

HDMI matrix | 1.4

Colour	Description	Resolution	Type no.
Black	HDMI 4K Matrix Switch 4x4, IP, RS232, remote controle, software	4K@30Hz	AC7860

HDMI repeater | 2.0

Colour	Description	Resolution	Type no.
White	HDMI-A female - HDMI-A female	4K@60Hz*	AC7820

*Max. distance: 1080@ 60Hz = 40m / 4K@ 60Hz = 25m (can only be realized witch good quality HDMI cabes

AC7830

AC7820

Video cables

HDMI and DVI adapter

Colour	Description	HQ Adapter fully shielded	SQ Adapter
White	HDMI-A female-DVI-D 18+1 male single link	AB3760	AP1004
White	HDMI-A male-DVI-D 24+5 female single link	AB3765	AP1006
White	HDMI-A male-DVI-D female links	AB3766	
White	DVI-I 24+5 female-DVI-I 24+5 female	AB3730	
White	DVI-I 24+5 female-DVI-D 18+1 male	AB3740	AP1001
White	DVI-A 12+5 female-VGA female	AB3750	AP1002
White	DVI-I 24+5 female-VGA male	AB3755	AP1003

HDMI, DVI and VGA converter cable, SQ

Colour	Description	1m	1.8m	2m	3m	5m	10m	15m
Black	HDMI-A male-DVI-D male single link	AK3739		AK3740	AK3741	AK3742		
Black	DVI-A male-VGA male			AK3850				
Ivory	DVI-A male-VGA male		AK3650		AK3651	AK3652	AK3654	
Grey	VGA male-5x BNC male		AK8116					

Converter cable, SLAC (Super Low Attenuation cable)

Colour	Description	1m	1.8m	2m	3m	5m	10m	15m
Black	HDMI-A male-DVI-D male single link						AK3744	AK3746

USB C converter

Colour	Description	Resolution	0.15m	2m
Black	USB C male - HDMI male	4k@60HZ		SB0030
White	USB C male - DisplayPort female	4k@60Hz	SB0020	
Black	USB C male - DisplayPort male	4k@60Hz		SB0031
White	USB C male - Mini DisplayPort female	4k@60Hz	SB0021	
Black	USB C male - DVI male	4k@30Hz		SB0033
Black	USB C male - VGA male	1080@60Hz		SB0032

The USB C port needs to support DisplayPort alternate mode which can be recognized by the DP logo near the USB C port (like MacBook).

USB-C video adapters

Colour	Description	1080@60Hz	4K@30Hz	4K@60Hz	MST	
Aluminium	USB C male - VGA female	✓	X	X	X	AC7000
Aluminium	USB C male - HDMI female	✓	✓	✓	X	AC7010
Aluminium	USB C male - 2x HDMI male	✓	✓	✓	✓	AC7012
Aluminium	USB C male - HDMI male (+Power delivery support)	✓	✓	✓	X	AC7020
Aluminium	USB C male - DisplayPort female	✓	✓	✓	X	AC7030

The USB C port needs to support DisplayPort alternate mode which can be recognized by the DP logo near the USB C port (like MacBook).

USB-C video adapter cable

Colour	Description	4K@60Hz	Length	
Aluminium	USB C male - HDMI male	✓	1.8m	AC7015
Aluminium	USB C male - DisplayPort male	✓	1.8m	AC7035

The USB C port needs to support DisplayPort alternate mode which can be recognized by the DP logo near the USB C port (like MacBook).

USB-C multiport laptop docking

Colour	Description	USB-A	USB-C	Card reader	PD	MST	
Aluminium	USB-C Multiport Laptop Docking	1	0	X	✓	X	AC7040
Aluminium	USB-C Multiport Laptop Docking with cardreader	2	0	✓	✓	X	AC7041
Aluminium	USB-C Multiport Laptop Docking	3	0	X	✓	X	AC7042
Aluminium	USB-C Multiport Laptop Docking with cardreader and 3.5mm audio jack	3	0	✓	✓	X	AC7043
Aluminium	USB-C Multiport Docking Station MST	4	2	✓	✓	✓	AC7045
Aluminium	USB-C 4K Multiport Docking Station MST	3	1	✓	✓	✓	AC7046

The USB C port needs to support DisplayPort alternate mode and can be recognized by the DP logo at your USB C Connector (for example a MacBook).

DVI cable

Colour	Description	0,5m	1m	1,5m	1,8m	2m	3m	5m	10m	15m
DVI-D cable, HQ										
Ivory	Dual link male-male				AK3630		AK3631	AK3632	AK3634	
Ivory	Single link male-male				AK3620		AK3621	AK3622	AK3624	
Ivory	Single link male-female					AK3760				
DVI-I cable, HQ										
Ivory	Dual link male-male					AK3720	AK3721	AK3722	AK3724	
DVI-D cable, SQ										
Black	Dual link male-male	AK3829	AK3833	AK3834	AK3829	AK3830	AK3831	AK3832		
Black	Dual link male-female					AK3970	AK3971			
Black	Single link male-male	AK3819	AK3823	AK3824		AK3820	AK3821	AK3822		
DVI-I cable, SQ										
Black	Dual link male-male			AK3953		AK3950				
DVI-D cable, SLAC (super low attenuation cable)										
Black	Single link male-male								AK3625	AK3626

VGA cable

Colour	Description	0,5m	1m	1,8m	3m	5m	7m	10m	15m	20m	25m	30m
Molded hoods												
Black	male-female	AK4210	AK4211	AK4220	AK4223	AK4225	AK4227	AK4229	AK4231	AK4233	AK4235	AK4237
Black	male-male	AK4250	AK4251	AK4260	AK4263	AK4265	AK4267	AK4269	AK4271	AK4273	AK4275	AK4277
Metal hoods												
Black	male-female			AK9020	AK9023	AK9025	AK9027	AK9029	AK9031			AK9037
Black	male-male			AK9060	AK9063	AK9065	AK9067	AK9069	AK9071	AK9073	AK9075	AK9077
Molded hoods, ultra high performance												
Black	male-female	AK4918	AK4919	AK4920	AK4923	AK4925		AK4929				
Black	male-male	AK4958	AK4959	AK4960	AK4963	AK4965	AK4967	AK4969	AK4971	AK4973		AK4977
Metal hoods, ultra high performance												
Black	male-male			AK9360	AK9363	AK9365	AK9367	AK9369	AK9371	AK9373	AK9375	AK9377
VGA cable, SQ												
Ivory	male-female			AK3220								
Ivory	male-male			AK3225								

VGA + audio cable

Colour	Description	2m	3m	5m	7m	10m	15m	20m
Black	male-female	AK4980	AK4981	AK4982		AK4984		
Black	male-male	AK4990	AK4991	AK4992	AK4993	AK4994	AK4995	AK4996

VGA split cable

Colour	Description	0.25m
Black	1x male-2x female	AK3187

Audio cables

ACT offers a wide range of professional audio cables:
- High quality transparent oxygen-free copper cables with gold-plated connectors
- Standard audio cables
- POF audio cables

AUDIO

High quality audio cable

Colour	Description	0.5m	1.5m	2m	3m	5m	10m	15m
Black	2x RCA male - 1x 3,5mm stereo jack male			AK6230	AK6232	AK6234	AK6236	
Black	3,5mm stereo jack male - male			AK6240	AK6243	AK6244	AK6246	AK6247
Black	3,5mm stereo jack male - female			AK6250	AK6252	AK6254	AK6256	
Black	2x RCA male - 2x RCA male	AK6218	AK6220		AK6222			

Audio cable

Colour	Description	0.15m	0.20m	1.20m	1.5m	2.5m	3m	5m	10m	15m
Black	3,5mm stereo jack male - male				AK2035	AK2036		AK2037	AK2038	AK2039
Black	3,5mm stereo jack male - female						AK2030	AK2031		
Black	1x 3,5mm stereo jack male - 2x RCA female	AK2026								
Black	1x 3,5mm stereo jack female - 2x RCA male	AK2027								
Black	1x 3,5mm stereo jack male - 2x RCA male			AK2075		AK2076		AK2077	AK2078	
Black	2x RCA male - male			AK2014		AK2015				
Black	1x RCA male - 2x RCA female		AK2025							

POF audio cable

Colour	Description	1.20m	2m	3m
Black	Optical audio TOS to TOS		AK2462	AK2463
Black	Ewent SPDIF optical audio TOS to TOS	EC2462		

High quality audio cable

Colour	Description	2m	3m	5m	10m	15m
White	2x tulp male - 1x 3,5mm stereo jack male	AK2230	AK2232	AK2234	AK2236	AK2237
White	3,5mm stereo jack male - male	AK2240	AK2242	AK2244	AK2246	AK2247
White	3,5mm stereo jack male - female	AK2250	AK2252	AK2254	AK2256	
White	Audio video 1x tulp male - male	AK2270	AK2272			
White	Audio 2x tulp male - male	AK2220				

Audio cable

Colour	Description	0.15m	0.20m	1.20m	1.5m	2.5m	3m	5m	10m	15m
Black	3,5mm stereo jack male - male				AK2035	AK2036		AK2037	AK2038	AK2039
Black	3,5mm stereo jack male - female						AK2030	AK2031		
Black	1x 3,5mm stereo jack male - 2x tulp female	AK2026								
Black	1x 3,5mm stereo jack female - 2x tulp male	AK2027								
Black	1x 3,5mm stereo jack male - 2x tulp male			AK2075		AK2076		AK2077	AK2078	
Black	2x tulp male - male			AK2014		AK2015				
Black	1x tulp male - 2x tulp female		AK2025							

POF audio cable

Colour	Description	1.20m	2m	3m
Black	Optical audio TOS to TOS		AK2462	AK2463
Black	Ewent SPDIF optical audio TOS to TOS	EC2462		

Power

Power cords

Power cords deliver power to hardware devices. ACT provides many types of different power cords.
All these cables stand for excellent performance (quality) and durability.

Types
ACT provides many kinds of power cords: CEE7/7, IEC60320 C5, C7, C13, C14, C15, C19, C20,
IEC60309 CEE1. ACT also provides various types of power split cables.

Power cords in different colors
Besides the traditional black power cords we supply the IEC60320 C13, C14, C19 and C20 cables
in different colors to make your power manageable.

ACT offers a wide range of professional power cords:
- 230 V power cords
- Euro power cords
- IEC 60320 power cords
- 230 V splitter cables

Male	Female	shape	Max. power	Max. temp.
C6	C5		2.5 A	70 °C
C8	C7		2.5 A	70 °C
C14	C13		10 A	70 °C
C16	C15		10 A	120 °C
C20	C19		16 A	70 °C
C22	C21		16 A	155 °C
CEE1			16 A	
CEE7/7			16 A	

POWER

Power cords

230V power cord

Colour	Description	0.5m	0.6m	1m	1.2m	1.5m	1.8m	2m	2.5m	3m	4m	5m	7m	10m
Black	CEE 7/7 male angled - C13	AK5145		AK5146		AK5012		AK5015	AK5010	AK5124	AK5125	AK5016	AK5126	AK5127
White	CEE 7/7 male - C13					AK5235		AK5236	AK5237	AK5238		AK5239		
Ivory	CEE 7/7 male - C13					AK5013			AK5009					
Black	CEE 7/7 male - C13					AK5014			AK5017					
Black	CEE 7/7 male angled - C13							AK5018						
Red	CEE 7/7 male angled - C13		AK5128		AK5129		AK5130			AK5131				
Blue	CEE 7/7 male angled - C13		AK5132		AK5133		AK5134			AK5135				
Green	CEE 7/7 male angled - C13		AK5136		AK5137		AK5138			AK5139				
Yellow	CEE 7/7 male angled - C13		AK5140		AK5141		AK5142			AK5143				
Black	CEE 7/7 male angled - C15					AK5001								
Black	CEE 7/7 male angled - C5			AK5162				AK5144		AK5024		AK5163	AK5188	AK5189
Black	CEE 7/7 male angled - C5 angled						AK5005			AK5006		AK5007		
Black	CEE 7/7 male straight - C19			AK5147						AK5022		AK5148		
Red	CEE 7/7 male angled - C19		AK5167		AK5168		AK5169			AK5170				
Blue	CEE 7/7 male angled - C19		AK5171		AK5172		AK5173			AK5174				
Green	CEE 7/7 male angled - C19		AK5175		AK5176		AK5177			AK5178				
Yellow	CEE 7/7 male angled - C19		AK5179		AK5180		AK5181			AK5182				
Black	CEE 7/7 male angled - C19		AK5183		AK5184		AK5185			AK5186				
Black	C14 - Type F female (max. 10 A)	AK5219												

230 V Power cable LSZH

Colour	Description	1m	1,5m	2m	2,5m	5m
Black	CEE 7/7 male angled - C13	AK5209	AK5210	AK5211	AK5212	AK5213

Euronet cable

Colour	Description	1,5m	2m
Black	Euro male - C7 female	AK5020	
Black	Euro male - C7 f (angled down)		AK5008
Black	Euro male - C7 f (angled left/right)		AK5019

IEC 60320 cable

Colour	Description	0.3m	0.6m	0.9m	1.2m	1.5m	1.8m	2m	2.5m	3m	4m	5m	7m	10m
Black	C13-C14	AK5164	AK5029	AK5165	AK5120		AK5030			AK5031	AK5149	AK5032	AK5121	AK5122
Red	C13-C14		AK5104		AK5105		AK5106			AK5107				
Blue	C13-C14		AK5108		AK5109		AK5110			AK5111				
Green	C13-C14		AK5112		AK5113		AK5114			AK5115				
Yellow	C13-C14		AK5116		AK5117		AK5118			AK5119				
Black	C13 - C20							AK5026						
Black	C19 - C20		AK5085		AK5086			AK5023		AK5087				
Red	C19 - C20		AK5088		AK5089		AK5090			AK5091				
Blue	C19 - C20		AK5092		AK5093		AK5094			AK5095				
Green	C19 - C20		AK5096		AK5097		AK5098			AK5099				
Yellow	C19 - C20		AK5100		AK5101		AK5102			AK5103				
Black	CEE1 - C19								AK5021					
Black	C14 - C5							AK5028						
Black	C14 - C15		AK5232		AK5233			AK5003	AK5234					
Black	C14 - C19							AK5025						
White	CEE 7/7 male angled - C13		AK5243		AK5244		AK5245							

IEC 60320 cable LSZH

Colour	Description	1.2m	1.8m	3m	5m
Black	C13-C14	AK5214	AK5215	AK5216	AK5217

230 V Split cable

Colour	Description	1m	1.2m	1.8m
Black	CEE 7/7 male - 2x C13	AK5050	AK5055	
Black	CEE 7/7 male - C5+C13			AK5166
Black	CEE 7/7 male - 2x C5			AK5208
Black	C14 - 2x C13			AK5052

230 V UK power cable

Colour	Description	1.8m	2.5m
Black	UK power connector - C5	AK5072	
Black	UK power connector - C7	AK5070	
Black	UK power connector - C13		AK5060

120 V USA power cable

Black	USA power connector - C5	AK5076	
Black	USA power connector - C7	AK5074	
Black	USA power connector - C13		AK5062

230 V international power cable

Black	Danisch power connector - C13		AK5064
Black	Italian power connector - C13		AK5066
Black	Swiss power connector - C13		AK5068

USB cables

USB cables

ACT offers a wide range of USB cables (USB 3.2, USB C, USB 2.0), USB adapters and cables.
For each type of cable you can quickly and easily find the length you are looking for (including the item number). Please contact us if you can't find the cable or the length that you are looking for.
We will assist you in finding the right solution.

COPPER CONDUCTORS

100% TESTED

5 YEAR WARRANTY

Many people associate USB-C or USB Type-C directly with USB 3.2. However, USB-C is much more! Below we will explain USB-C / USB Type-C and the advantages and applications of this standard.

USB generations
First, we want to explain all USB generations. As mentioned above, many people think that USB 3.2 (a.k.a. USB3.1) is the same as USB-C. The main reason for this association is that USB 3.1 (nowadays known as USB3.2) was equally released with the USB-C standard. Could it be more confusing? Yes it can!

USB 3.2 has three versions: USB 3.2 Gen1, USB 3.2 Gen2 and USB 3.2 Gen2x2. Gen1 has a maximum speed of 5Gbit/s, Gen2 a maximum speed of 10Gbit/s and Gen2x2 a maximum speed of 20Gbit/s. USB 3.2 Gen1 is also called USB 3.1 Gen1, USB 3.0 or SuperSpeed. SuperSpeed+ is the name of USB 3.2 Gen2 and USB 3.1 Gen2.

Below a short overview of how the USB 3.2 is categorized:
*   USB 3.2 Gen 1: originally known as USB 3.0, and previously renamed to USB 3.1 Gen 1. It's the original USB 3.0 specification, and it can transfer data at up to 5Gbps.
*   USB 3.2 Gen 2: Previously known as USB 3.1, and then later as USB 3.1 Gen 2. It offers speeds at up to 10Gbps.
*   USB 3.2 Gen 2x2: formally known as USB 3.2, is the newest and fastest spec, promising speeds at up to 20Gbps (by using two lanes of 10Gbps at once therefor it is called Gen2x2 instead of Gen3).

Version	Name	Alternate name	Current	Voltage	Power	Bandwidth
USB 1.0	LowSpeed		0,15A	5V	0,75W	1,5 Mbit/s
USB 1.1	FullSpeed	Universal	0,15A	5V	0,75W	12 Mbit/s
USB 2.0	Highspeed	Enhanced	0,5A	5V	2,5W	480 Mbit/s
USB 3.2 Gen1	Superspeed 5Gbps	USB 3.0 USB 3.1 Gen 1	2A	5V	10W	5 Gbit/s
			3A	9V	27W	
			3A	12V	36W	
USB 3.2 Gen2	Superspeed 10Gbps	USB 3.1 USB 3.1 Gen 2	2A	5V	10W	10 Gbit/s
			3A	9V	27W	
			3A	12V	36W	
			3A	15V	45W	
			5A	20V	100W	
USB 3.2 Gen2x2	SuperSpeed 20Gbps	USB 3.2	2A	5V	10W	20 Gbit/s
			3A	9V	27W	
			3A	12V	36W	
			3A	15V	45W	
			5A	20V	100W	

USB 2.0 is also a well-known version. It is the predecessor of USB 3.1. USB 2.0 has a maximum speed of 480Mbps. Did you know that HighSpeed is the other name for USB 2.0?

The advantages of USB-C:

The advantages of USB-C:
- Symmetrical reversible connection
- Small connector
- Charge faster and more safe with Power Delivery (PD)
- Thunderbolt™3 support: one cable for both images and power
- Support for DisplayPort Alternate Mode

A compact reversible connection
Are you always struggling with USB-A cables? When connecting a USB-A plugin into your computer, you always try the wrong side first. Always! This struggle belongs to the past with this USB-C connector. The USB-C connector doesn't have a top or bottom side. You can plug the connector either way into your device. The other big advantage of this connector is its compact size. This makes new laptops, smartphones and other devices with USB-C smaller and more light-weight.
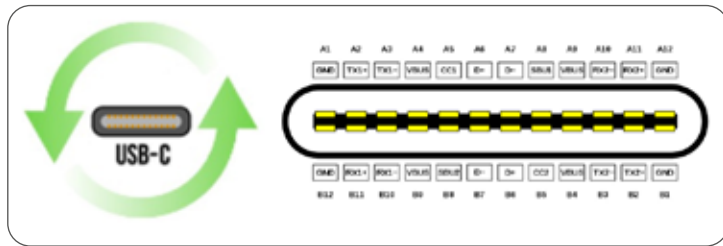
4 in 1: Video, Data, Audio and Power are combined in one cable:
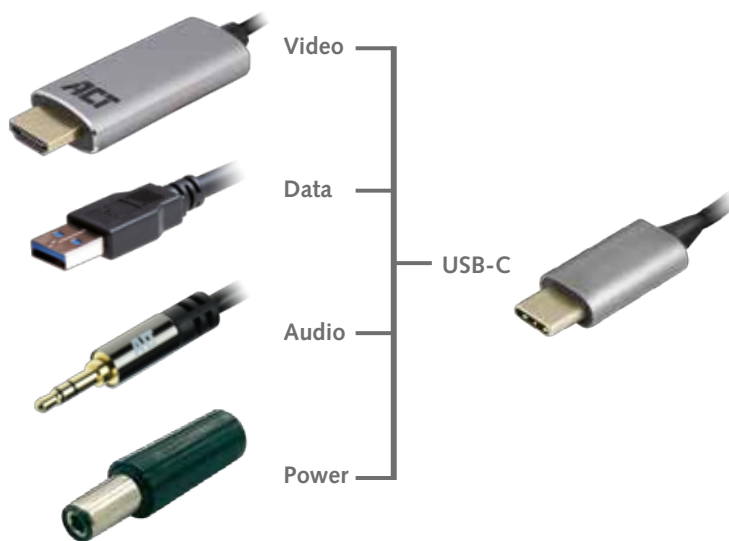
Additional Protocols using USB-C
Attention: the protocols below aren't supported by every device. Please check the manual of the device for more information about the supported protocols.

USB-C: intelligent chip (e-marker)
An intelligent chip takes care of the fast charging possibilities. A DFP (Downstream Facing Port) determines via the e-marker chip which features are supported. Like: fast charging via Power Delivery (PD), Thunderbolt™3 or DisplayPort Alternate Mode (DP Alt mode). Active cables and converters: each cable end can have a different active function. All active USB-C cables need an e-marker chip to restore the USB signals. This is the case with USB booster cables.

DisplayPort Alternate Mode (DP Alt mode) for connecting (4K) monitors USB Type-C supports DisplayPort Alternate Mode (DP Alt mode). This makes it possible to transfer (4K) videos simultaneously with data and power.

Port Configuration	DisplayPort 1.4a	DisplayPort 2.0
4 Lanes, max link rate	5k (5120x2800)@60fps 24bpp	10k (10240x4320)@60fps 24bpp
2 Lanes, max link rate	4k (3840x2160)@60fps 24bpp	8k (7680x4320)@30fps 30bpp
With Compression (DSC)		
4 Lanes, max link rate	8k (7680x4320)@60fps 30bpp	16k (15360x8460)@60fps 30bpp
2 Lanes, max link rate	5k (5120x2800)@60fps 24bpp	10k (10240x4320)@72fps 30bpp

| Notes:	Key:
-2 Lanes configuration is common for USB-C DP Alt mode -All above modes assume full 4:4:4 color encoding -30bpp is required for DisplayHDR operation	- DSC = Display Stream Compression - fps = frames per second - bpp = bits per pixel

DP 2.0 Mandates Support for Display Signal Compression (DSC)
- VESA released DSC 1.2a in January 2017.
- DSC is now the industry standard data compression across the display interface.
- DSC was purposely designed to offer low latency, low complexity codec for visually lossless image compression to increase the amount of data carried by a display interface data rate, saving power.
- Key features include
- Native 4:2:0 and 4:2:2 coding, Up to 16 bits per color, High Dynamic Range (HDR)
- DSC is mandated in DP 2.0 specification and is a powerful feature to allow designers to optimize BW, performance and power for Native DP, DP Alt mode products and tunnelled DP over USB4.

USB-C: Video output over USB-C for tablets and phones
In the past, some Android phones were supported by MHL "Mobile High-definition Link". To be able to use MHL, you still had to have a special MHL cable and your TV / monitor / beamer also needed MHL support to view the images of your phone on a TV / monitor / beamer.

Now more and more phones are released that use "Display over USB" instead of MHL support. Giving you the opportunity to easily convert images via your USB-C to your TV / monitor / beamer without having to use MHL support.
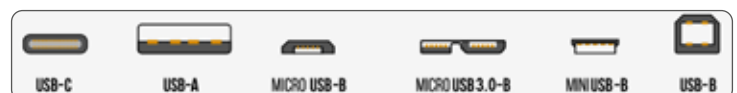
DSC for better compression

Next generation video products need a higher level of compression to be able to deliver for example 8K output or dual/triple display support at 4K. Therefor in USB-C there has been the introduction of Display Stream Compression (DSC). DSC was the first to offer a low latency, low complexity codec expressly designed for this purpose.

For mobile applications, DSC 1.1 mainly serves to reduce the video interface data rate, which reduces system power, prolongs battery life and reduces interconnects to enable sleeker designs. For external display interfaces, DSC 1.2a extends resolution across existing connectors and cables, enabling 8K video and legacy support from the same connection.

DSC 1.2a is an additional standard to DP 1.4. So if you buy A USB-C device that needs DSC you will need to check if your PC or Notebook supports both DP 1.4 and DSC 1.2a to get the maximum out of your device. Since DP 2.0 DSC is supported by default.

- DSC was purposely designed to offer low latency, low complexity codec for visually lossless image compression to increase the amount of data carried by a display interface data rate, saving power.
- Native 4:2:0 and 4:2:2 coding, Up to 16 bits per color,
- High Dynamic Range (HDR)
- DSC is mandated in DP 2.0 specification and is a powerful feature to allow designers to optimize BW, performance and power

Thunderbolt™ 3 support

It is possible to name Thunderbolt™ 3 in the same line with USB-C. Other Thunderbolt™ versions are using their own interface. The third Thunderbolt™ generation is using USB-C. Only one connection is used for multiple protocols: USB-C. Convenient right?!
The biggest advantage of Thunderbolt™ 3 is the throughput speed of up to 40Gbit/s. This is four times faster than the throughput of USB 3.2 Gen2: 10Gbits/s. Besides, Thunderbolt™ 3 can provide power and images to two 4K screens of max. 60Hz. All used peripherals, like a laptop, screens and cables, must support Thunderbolt™ 3. Devices that require the protocols mentioned before (Power Delivery and/or DP Alt mode) will also work on Thunderbolt™ 3 devices.

Charge faster and safer with Power Delivery

USB-C additionally can support Power Delivery (PD). This protocol enables your smartphone to charge up to 70% faster than by using a normal charger. One footnote: both the charger and the connected device must support Power Delivery. They both have built-in chips that communicate with each other to decide the best PD profile. Did you connect a USB-C accessory with PD support between the charger and the device? This USB-C accessory will communicate as well with the charger and the device. Besides this all, USB-C with PD enables charging in two directions. For example, you can charge your smartphone with your tablet but also your tablet with your smartphone. Which Power Delivery profiles are available? 5V, 9V, 12V, 15V and 20V.

With USB Power Delivery it is possible to charge your device with a high power output up to 100W therefor you will be able to Power/charge even Notebooks/Ultrabooks/Displays All these Chips together will determine which Power profile is safe to use for the entire setup. For example if you have a USB-C charger that can supply 100W (20V 5A) and your laptop needs to be powered at 60W (20V 3A) the USB-C charger will provide a 60W (20V 3A) output.

Now for example you will use a USB-C cable that has an e-marker chip of a max power throughput up to 45W in the same setup the USB-C charger will provide a max power output of 45W. If the USB-C cable or one of the attached products do not have a PD chip the USB-C charger will no longer provide a PD profile and will power the entire setup at 5V default USB power profile

Which technology or protocol does my USB-C laptop support?

Each technology/protocol has its own logo. In the best case these logos are visible next to the USB-C port on your laptop. The only thing is that suppliers aren't obligated to put the logos on the laptop. No symbol next to the USB-C port on your laptop? Please consult the manual of the laptop's supplier to check which technology/protocol this Type-C port supports.

USB-C cables, one cable for all applications, right?
You can use a cable with USB-C connector for every purpose (charging/data transfer), right? Nothing could be further from the truth. The quality of a USB-C cable can be completely different than the quality of another USB-C cable. It is of great importance to use qualified cables to prevent irreparable damage to your valuable equipment.

What are the qualities of a good cable:
- The most important factor is the connector. This connector must have a seamless design.
- Some manufactures are recommending some cables that can be safely used.
- Charging your laptop requires a more powerful cable than a plain data cable. Please pay attention to this!

What is MST (Multi Stream Transport)?

MST is part of the DisplayPort 1.2 standard, with which monitors and computers can support "daisy-chaining". You usually recognize daisy-chaining when the monitor has both an input and output DisplayPort, so that you can connect the first monitor to the computer and the second monitor to the first monitor. If both the monitor and the computer support MST daisy-chaining, the two screens work as separate screens. Exactly as if they were connected directly to the computer.

USB-C and MST

Within the USB-C it is possible that the DP-alt mode (DisplayPort alternate mode) is supported by your laptop / PC. If this is the case it will also support MST, and you can choose to use a USB-C to MST adapter, this adapter has multiple video outputs that you can use to have multiple monitors (even if they don't support MST) to connect to an MST (daisy chain). The connected screens can now be recognized as separate screens on your laptop / PC and be used as an extended desktop.

MST on macOS

Please note!!! macOS does not support MST Daisy chaining. macOS only supports Daisy-chaining with the Thunderbolt™ 3 standard. So the MST adapters will not provide the desired result for macOS devices, the connected screens in this case only show a clone (copy) of your main screen on the connected screens also called SST (Single Stream Transport).

USB-C summarized for you

- New standard for compact connector
- Supports transfer speed up to a maximum of 20 Gbps (40Gbps when used with Thunderbolt™ 3
- Compatible with all other USB devices
- Faster charging by PD, with power supply in two directions
- Possibility to send video up to a 4K resolution through a USB cable
- Alternate Mode (DP Mode) for simultaneous image, audio and data
- Thunderbolt™ 3 for even faster data transfer

15W	36W	100W
USB 2.0 USB 3.0	USB 3.2 Gen1	USB 3.2 Gen2 USB 3.2 Gen2x2

USB Power Delivery
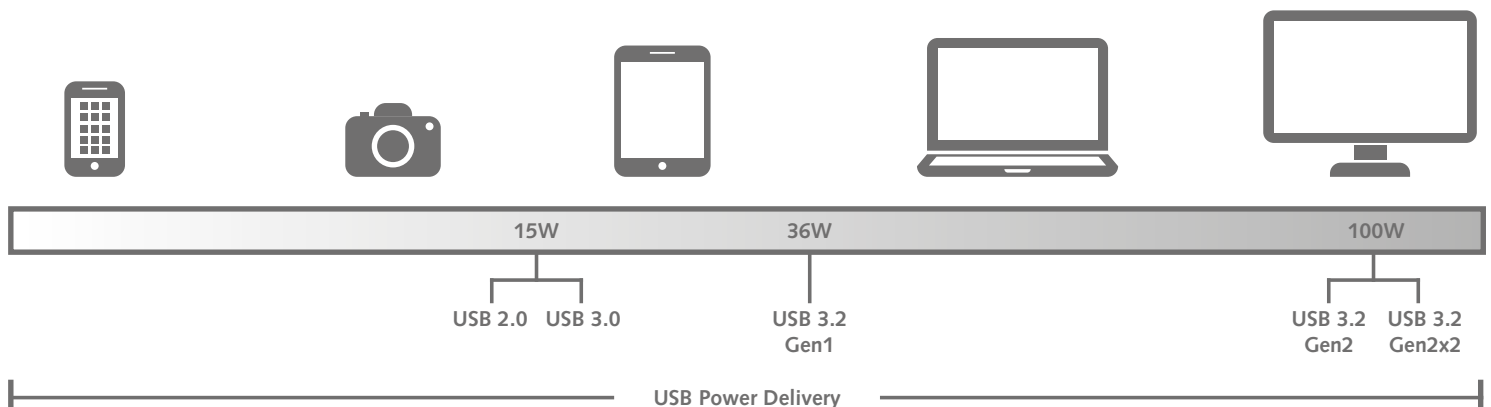
USB 3.0 cable (USB 3.2 Gen1)

Colour	Description	0.5m	1m	1.5m	2m	3m	5m
Black	USB 3.2 Gen1 A male - A male Double shielded				SB3002	SB3003	SB3005
Black	USB 3.2 Gen1 A male - A male	SB3010	SB3011		SB3013	SB0001	SB0002
Black	USB 3.2 Gen1 A male - A female	SB3040	SB3041	SB3042	SB3043		
Black	USB 3.2 Gen1 A male - B male	SB3016	SB3017		SB3019	SB0003	SB0004
Black	USB 3.2 Gen1 A male - USB 3.0 micro B male	SB3028	SB3029		SB3031		

USB 2.0 cable

Colour	Description	0.5m	1m	1.8m	2m	3m	5m
Black	USB 2.0 A male - USB 2.0 A female	SB2218		SB2220		SB2230	SB2250
Black	USB 2.0 A male - USB 2.0 A female (AWG20)					SB0036	
Off-white	USB 2.0 A male - USB 2.0 A female	SB2198	SB2199	SB2200		SB2203	SB2205
Off-white	USB 2.0 A male - USB 2.0 A male				SB2502	SB2503	
Black	USB 2.0 A male - USB 2.0 A male			SB2520		SB2530	SB2550
Black	USB 2.0 A male - USB 2.0 B male	SB2398	SB2401	SB2402		SB2403	SB2405
Black	USB 2.0 A male - USB 2.0 B male angled			SB2408			
Black	USB 2.0 A male - USB 2.0 mini B male			SB2412		SB2413	SB2415
Black	USB 2.0 A male - USB 2.0 mini B male			SB2432			
Black	USB 2.0 A male - USB 2.0 micro B male	SB0005	SB0006		SB2498	SB0007	SB0008
Black	USB 2.0 micro B male - USB 3.0 micro B male				SB2602		
Black	USB 2.0 mini A male - USB 2.0 B male			SB2482			
Black	USB 2.0 mini A male - USB 2.0 mini B male			SB2452			

USB Extender over CAT cable

Colour	Description	Max. cable length 50m
Grey	USB A 1.1 male - USB A 1.1 female, RJ45 (x2)	AC6060
Black	USB A 2.0 male - USB A 2.0 female, RJ45 (x2)	AC6063

USB 2.0 booster cable

Colour	Description	5m	10m
Black	USB 2.0 A male - USB 2.0 A female, cascadable 4x	AC6005	AC6010

USB 3.2 Gen1 booster cable

Colour	Description	5m	10m
Black	USB 3.2 A male - USB 3.2 A female, cascadable 2x	AC6105	AC6110

USB adapters

Colour	Description	Type no.
Black	USB 2.0 A female - USB 2.0 mini B male	SB4040
Black	USB 3.2 Gen1 C male - USB A female adapter	SB0037

Thunderbolt ™²

Colour	Description	1m
Black	Thunderbolt tm 2 male - Thunderbolt ™² male	SB0010
Off-white	Thunderbolt tm 2 male - Thunderbolt ™² male	SB0009

USB-C cable

Colour	Description	USB 2.0	USB 3.2 Gen1	USB 3.2 Gen2	Length	Type no.
Black	USB 3.2 Gen1 connection cable C male - C male 1,00 m	X	✓	X	1m	SB0011
Black	USB 2.0 connection cable C male - A male 1,00 m	✓	X	X	1m	SB0014
Black	USB 3.2 Gen1 connection cable C male - A male 1,00 m	X	✓	X	1m	SB0012
Black	USB 3.2 Gen2 connection cable C male - C male 1,00m (Thunderbolt ™³)	X	X	✓	1m	SB0028
Black	USB 3.2 Gen1 connection cable C male - C male 2,00 m	X	✓	X	2m	SB0029

USB-C video adapters

Colour	Description	1080@60Hz	4K@30Hz	4K@60Hz	MST	Type no.
Aluminium	USB C male - VGA female	✓	X	X	X	AC7000
Aluminium	USB C male - HDMI female	✓	✓	✓	X	AC7010
Aluminium	USB C male - 2x HDMI male	✓	✓	✓	✓	AC7012
Aluminium	USB C male - HDMI male (+Power delivery support 65W)	✓	✓	✓	X	AC7020
Aluminium	USB C male - DisplayPort female	✓	✓	✓	X	AC7030

USB-C video adapter cable

Colour	Description	4K@60Hz	Length	Type no.
Aluminium	USB C male - HDMI male	✓	1.8m	AC7015
Aluminium	USB C male - DisplayPort male	✓	1.8m	AC7035

USB-C 3.2 gen1 hubs

Colour	Description	USB-A	USB-C	PD	Ethernet	Card reader	Type no.
Aluminium	USB-C Hub with card reader and PD Pass-Through	3	0	65W	X	✓	AC7050
Aluminium	USB-C Hub with card reader	3	0	X	X	✓	AC7051
Aluminium	USB-C Hub with Card Reader and PD Pass-Through	3	0	65W	X	✓	AC7052
Aluminium	USB-C Hub with PD Pass-Through	4	0	65W	X	X	AC7053
Aluminium	USB-C Hub with Gigabit ethernet port	3	0	X	✓	X	AC7055

USB-C 3.2 Gen2 hubs

Colour	Description	USB-A	USB-C	Type no.
Aluminium	USB-C Hub with USB-C and USB-A	2	2	AC7070

USB

USB-C Gigabit network adapter

Colour	Description	Cable length	Type no.
Aluminium	USB-C Gigabit network adapter	15cm	AC7080

USB-C - SSD Enclosure

Colour	Description	Cable length	Type no.
Aluminium	USB-C M.2 NVMe SSD Enclosure	25cm	AC7090

USB-C male - 3.5mm audio jack female PD-passthrough

Colour	Description	Cable length	Type no.
Aluminium	USB-C male - 3.5mm audio jack female PD-passthrough 65W	15cm	AC7005

USB-C hub with HDMI

Colour	Description	USB-A	USB-C	4K@30Hz	Card reader	PD	Type no.
Aluminium	USB-C to HDMI 4K@30Hz adapter with hub and card reader	2	1	✓	✓	60W	AC7021
Aluminium	USB-C to HDMI 4K@30Hz adapter with USB-A port	1	0	✓	X	60W	AC7022
Aluminium	USB-C to HDMI 4K@30Hz adapter with USB Hub and card reader	2	0	✓	✓	60W	AC7023
Aluminium	USB-C Thunderbolt ™³ to HDMI 4K@30Hz adapter	2	2	✓	✓	100W	AC7025

The USB C port needs to support DisplayPort alternate mode and can be recognized by the DP logo at your USB C Connector (for example a MacBook).

USB-C multiport laptop docking

Colour	Description	USB-A	USB-C	Card reader	PD	MST	Type no.
Aluminium	USB-C Multiport Laptop Docking	1	0	X	60W	X	AC7040
Aluminium	USB-C Multiport Laptop Docking with cardreader	2	0	✓	60W	X	AC7041
Aluminium	USB-C Multiport Laptop Docking	3	0	X	60W	X	AC7042
Aluminium	USB-C Multiport Laptop Docking with cardreader and 3.5mm audio jack	3	0	✓	60W	X	AC7043
Aluminium	USB-C Multiport Docking Station MST	4	2	✓	100W	✓	AC7045
Aluminium	USB-C 4K Multiport Docking Station MST	3	1	✓	100W	✓	AC7046

The USB C port needs to support DisplayPort alternate mode and can be recognized by the DP logo at your USB C Connector (for example a MacBook).

Cable management

Choose cable management to:
1. Organise and guide bundeled cables
2. Separate cables per application
3. Identify individual ports

Tips cable management:
Below we will explain how these three goals can be reached and we will give you tips how to apply this in real life business applications. Cabling is a broad term, in this article we focused on network cabling (like UTP cables and CAT5E/CAT6/CAT6A cables) fiber optic cables and power cords.


Organise and guide cables in bundles
Network cables and fiber cables from a switch or server are often bundeled before bridging a distance of a few meters. This could be in a network cabinet or server room within an office network or datacenter. Cables in a server cabinet or networking cabinet are bundeled by cable management panels and cable ties (also called zip tie and zap strap).

Cable mangement panel
For optimal cable management we advise a cable management panel for every third patch panel. For vertical guidance you can use cable routers / shunting or a combination of cable ties and cable tie holders like pictured beside.
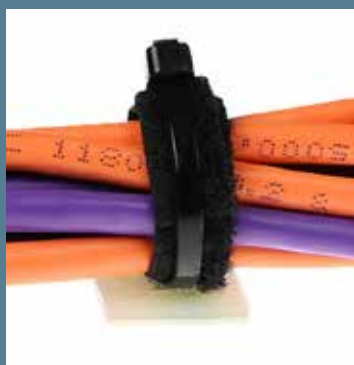
Seperate cables per application
Within a network you will find cables suitable for different applications. In a data network this can be telephony, data and backup cabling. In the power supply different cabling is used for the main data source and the backup supply which typically come from the UPS.

To make a clear distinction between these applications it's best to use coloured cabling. By using coloured cables it is possible to distinguish different applications at once.

Identify individual ports
In a data network you want to know which port of the switch is connected to which desk. This can be achieved by labeling individual cables and record what cable is used by what connection. Most common is usage of alfanumerical series with the same label on both sides.

There are different solutions for this:
A) Pre-printed labels
Labels with a pre-printed text are easy in use. We offer an assortment with pre-printed labels with letters, numbers and colour. Click here for our assortment.

B) Order cables including labels
ACT you can have your cables labeled. This is possible for nearly all of our cabling like network cables (CAT5E/CAT6/CAT6A), fiber optic cables, power cords etc. Advantages of labeled cables:
No investment in printers or other equipment
Freedom to specify what should be labeled and which place on the cable. Saving on labour time and costs because the cables are already labeled.

C) Print and attach your own labels
For printing your own labeling we offer a professional printer of Phoenix.

CABLE
MANAGEMENT

Cable tie transparent

Colour	Description	Packaging	Width	Length	Type no.
Transparent	Cable tie	bag 100 pieces	2,5 mm	100 mm	CT1010
Transparent	Cable tie	bag 100 pieces	3,6 mm	150 mm	CT1030
Transparent	Cable tie	bag 100 pieces	3,6 mm	203 mm	CT1040
Transparent	Cable tie	bag 100 pieces	4,6 mm	203 mm	CT1050
Transparent	Cable tie	bag 100 pieces	4,8 mm	280 mm	CT1060
Transparent	Cable tie	bag 100 pieces	4,8 mm	385 mm	CT1070
Transparent	Cable tie	bag 100 pieces	7,6 mm	38 mm	CT1080

Cable tie black

Colour	Description	Packaging	Width	Length	Type no.
Black	Cable tie	bag 100 pieces	2,5 mm	100 mm	CT1015
Black	Cable tie	bag 100 pieces	3,6 mm	150 mm	CT1035
Black	Cable tie	bag 100 pieces	3,6 mm	203 mm	CT1045
Black	Cable tie	bag 100 pieces	4,6 mm	203 mm	CT1055
Black	Cable tie	bag 100 pieces	4,8 mm	385 mm	CT1075
Black	Cable tie	bag 100 pieces	8 mm	450 mm	CT1090

Cable tie with label, transparent

Colour	Description	Packaging	Width	Length	Type no.
Transparant	Cable tie with label	bag 100 pieces	2,5 mm	100 mm	CT1300
Transparant	Cable tie with label	bag 100 pieces	2,5 mm	200 mm	CT1310

Cable tie cable mount adhesive, transparent

Colour	Description	Packaging	Width	Length	Type no.
Transparent	Cable tie mount adhesive	bag 100 pieces	4,6 mm	-	CT1260
Transparent	Cable tie mount adhesive	bag 100 pieces	5,5 mm	-	CT1270

Cable tie mount screw, transparent

Colour	Description	Packaging	Size	Type no.
Transparent	Cable tie mount screw	bag 100 pieces	16x23x9 mm	CT1200

Cable tie tie gun

Colour	Description	Packaging	Size	Type no.
Transparent	Cable tie gun, Economy	bag 100 pieces	for cables of 2,5 - 5,0 mm	CT3000
Transparent	Cable tie gun, Professional	bag 100 pieces	for cables of 2,5 - 5,0 mm	CT3010

Cable tie

Colour	Description	Packaging	Width	Length	Type no.
Black	Cable tie	bag 20 pieces	12 mm	125 mm	CT4003
Black	Cable tie	bag 20 pieces	12 mm	150 mm	CT4004
Black	Cable tie	bag 20 pieces	12 mm	180 mm	CT4005
Black	Cable tie	bag 20 pieces	16 mm	210 mm	CT4006
Black	Cable tie	bag 20 pieces	16 mm	240 mm	CT4007
Black	Cable tie	bag 20 pieces	16 mm	310 mm	CT4008

Cable management

Cable management panels

Colour	Description	Type no.
Black	Cable pass-through with brush	FA2070
Black	Cable pass-through with brush and bar	FA2071
Black	DUCT Cable management panel with cover	FA2072
Black	DUCT Cable management panel with cover 2U	FA2073
Black	Cable management panel 5 plastic rings 1U	FA2074
Black	Cable management panel 5 metal rings 1U	FA2075
Black	Shunting eye horizontal / vertical 1U	FA2076

Cable tie on reel

Colour	Description	Packaging	Width	Length	Type no.
Black	Cable tie	Reel 10 meter	15 mm	10 m	CT4009
Black	Cable tie	Reel 10 meter	20 mm	10 m	CT4010
Black	Cable tie	Reel 25 meter	12 mm (extra strong)	25 m	CT4041
Black	Cable tie	Reel 25 meter	20 mm (extra strong)	25 m	CT4043
Black	Cable tie	Reel 25 meter	10 mm	25 m	KL10
Black	Cable tie	Reel 25 meter	12 mm	25 m	KL12
Black	Cable tie	Reel 25 meter	16 mm	25 m	KL16
Black	Cable tie	Reel 25 meter	20 mm	25 m	KL20
Black	Cable tie	Reel 25 meter	25 mm	25 m	KL25

Knot cable tie, transparent

Colour	Description	Packaging	Size	Type no.
Transparent	Knot cable tie	bag 100 pieces	150 mm	CT4013

Twist cable tie, transparent

Colour	Description	Packaging	Diameter	Type no.
Transparent	Twist cable tie	bag 100 pieces	11 mm	CT4014
Transparent	Twist cable tie	bag 100 pieces	22 mm	CT4015
Transparent	Twist cable tie	bag 100 pieces	28 mm	CT4016

Spiral cord on reel, black

Colour	Description	Width	Length	Type no.
Black	Spiral cord	15 mm	50 m	CT4029
Black	Spiral cord	20 mm	30 m	CT4030
Black	Spiral cord	25 mm	20 m	CT4031

Tool for spiral cord

Colour	Description	Width	Type no.
Orange	Tool for spiral cord	15 mm	CT4032
Orange	Tool for spiral cord	20 mm	CT4033
Orange	Tool for spiral cord	25 mm	CT4034

Markers

Colour	Description	Description	Width	Length	Type no.
Coloured	Cable markers	Set of 10x 10 cable markers (numbered 0 to 9)			FA1500
Coloured	Cable markers 0~9	One set of 0~9	5,6 mm	33 mm	CT4011
Coloured	Cable marker self adhesive A~Z,/,+,-,0~15	Cable marker self adhesive A~Z,/,+,-,0~15	5,6 mm	33 mm	CT4012

Custom made cables

Custom made cabling

In addition to the extensive range of cabling, ACT is specialized in custom made cabling. Almost anything is possible in the field of copper and fibre assemblies.

Advantages of custom made cabling:
Extremely flexible, fast and attractively priced.
Thorough knowledge per area, in-house quality management.
We make a technical drawing for every custom made cable to assure 100% clarity for both parties.
It's possible to label cables with text / labels to your specific needs.

Custom labeling

Cable management is of crucial importance within datacenters.
In one glance you want to see which cables are connected.
Cable labeling is possible for almost any types of cable, such as network cables (CAT6 / CAT6A), fibre optic cables, DAC cables, power cords etc.

Benefits of custom labeling:
Save on labour costs, cables are already labelled.
No investment needed in printers and others equipment.
Self-specify what should be labelled and on which part of the cable.

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