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Catalog 2012



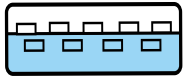
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Cables and Adapter



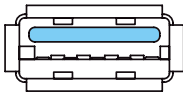
- Compliant with USB 3.0 specification.
- Double shielded
- Gold-plated contact
- REACH compliant



A/M



B/M



A/F



Micro

USB 3.0 Cable

USB 3.0 Connection Cable, A/M to A/M		Color	Length	PN
A/M	A/M	Blue	1.0	128294
			1.8	128295
			3.0	128296
		Black	1.0	128394
			1.8	128395
			3.0	128396

USB 3.0 Connection Cable, A/M to B/M		Color	Length	PN
A/M	B/M	Blue	1.0	128291
			1.8	128292
			3.0	128293
		Black	1.0	128391
			1.8	128392
			3.0	128393

USB 3.0 Extension Cable, A/M to A/F		Color	Length	PN
A/M	A/F	Blue	2.0	128298
			3.0	128299
		Black	2.0	128398
			3.0	128399

USB 3.0 Connection Cable, A/M to Micro		Color	Length	PN
A/M	Micro	Blue	1.8	128297
		Black	1.8	128397

USB 2.0 Cable



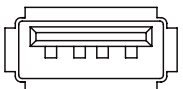
- Compliant with USB 2.0 specification.
- Double shielded
- Gold-plated contact
- REACH compliant



A/M



B/M



A/F



Micro



Mini 5pin



Mini 4pin

USB 2.0 Connection Cable, A/M to A/M		Color	Length	PN
A/M	A/M	Black	1.8	128870
			3.0	128871
			5.0	128872

USB 2.0 Connection Cable, A/M to B/M		Color	Length	PN	
A/M	B/M	Black	1.0	128863	
			1.8	128860	
			3.0	128861	
			5.0	128862	
			Transparent Silver	1.0	128653
				1.8	128650
3.0	128651				
			5.0	128652	

USB 2.0 Extension Cable		Color	Length	PN
A/M	A/F	Black	1.8	128850
			3.0	128851
			5.0	128852
		Transparent Silver	1.8	128750
			3.0	128751
			5.0	128752

USB 2.0 Connection Cable, A/M to Mini		Color	Length	PN
A/M	Mini 4pin	Black	1.8	128520
A/M	Mini 5pin		1.8	128521

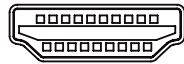
USB 2.0 Connection Cable, A/M to Micro		Color	Length	PN
A/M	Micro	Black	1.8	128523
		Retractable	1.0	128594
			1.0	128595

HighSpeed HDMI Cable with Ethernet

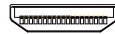


- Supports Ethernet channel
- 3D over HDMI and Audio Return channel
- True Dolby HD and DTS-HD Master Audio compatible
- Resolution up to 1080p for HDTV, UXGA for computer and 4k x 2k for digital theater
- Transfer rate to 10.2Gbps (340MHz)
- Gold-plated plugs

HighSpeed HDMI Cable with Ethernet		Length	PN
Type A	Type A	1.0	119341
		2.0	119342
		3.0	119343
	Swivel	1.0	119361
	Swivel	2.0	119362
	Swivel	3.0	119363
		5.0	119345
		7.5	119348
		10.0	119349
		20.0	119320
Type A	Type C	1.0	119306
		2.0	119307
Type A	Type D	1.0	119308
		2.0	119309



Type A



Type C



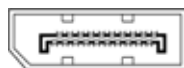
Type D

DisplayPort Cable



- Compliant with DisplayPort standard
- Double shielded
- Carries both video and audio signals
- Supports resolution up to 2560 x 1600

DisplayPort Cable		Color	Length	PN
DP	DP	Black	1.0	119331
			2.0	119332
			3.0	119333
Mini DisplayPort Cable				
Mini DP	DP	White	2.0	119334
Mini DP	Mini DP		2.0	119335



DP



Mini DP

DVI-D Dual Link Cable



DVI-D Dual Link Cable		Length	PN
DVI-D Male	DVI-D Male	1.8	118932
		3.0	118933
		5.0	118935
		10.0	118937

DVI-D Dual Link Extension Cable		Length	PN
DVI-D Male	DVI-D Female	1.8	118972
		3.0	118973

- Supports resolutions up to 2560 x 1600
- Double-shielded
- Gold-plated contact



DVI-D Male



DVI-D Female

Premium SVGA Cable



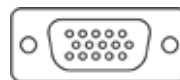
SVGA Cable		Length	PN
HDB15 Male	HDB15 Male	1.8	118860
		3.0	118861
		5.0	118862
		10.0	118864
		15.0	118865
		20.0	118866
		30.0	118867

SVGA Extension Cable		Length	PN
HDB15 Male	HDB15 Female	1.8	118850
		3.0	118851
		5.0	118852
		10.0	118854
		15.0	118855
		20.0	118856

- High quality metal shells
- 3 x coax and 7 x copper wires
- Built with knurled screws
- Double shielded



HDB15 Male



HDB15 Female

Video Adapter Cable



HDMI to DVI Adapter Cable		Length	PN
HDMI A/M	DVI/M	2.0	119322
		3.0	119323
		5.0	119325
		10.0	119329
DVI to VGA Adapter Cable			
DVI/M	VGA/F	1.8	118943

- Adapts different video interfaces
- Double shielded

Video Adapter



- Adapts different video interfaces
- Double shielded

HDMI Adapter			PN
HDMI A/M	HDMI A/F	Flat Angled	118910
		Foldable	118911
		Swivel	118912
HDMI C/M	HDMI A/F		118914
HDMI D/M	HDMI A/F		118915
HDMI to DVI Adapter			
DVI/Male	HDMI A/F		118908
HDMI A/M	DVI/F		118909
DisplayPort Adapter			
DP/M	Mini DP/F		118916
Mini DP/M	DP/F		118917



SATA 6G Internal Connection Cable

- Snap-in mounting
- SATA 7pin to SATA 7pin
- With metal latch
- Foil shielded
- UL certified

0.5m	111900
1.0m	111901
0.5m, angled	111902
1.0m, angled	111903



SATA Internal Connection Cable

- SATA 7pin to SATA 7pin
- With metal latch
- Foil shielded
- UL certified

0.5m	111800
1.0m	111801
0.3m, angled	111809
0.5m, angled	111802
1.0m, angled	111804



eSATA Cable Adapter with Bracket

- With metal latch
- 1 x SATA to 1 x eSATA
- SATA II compliant
- Foil shielded
- UL certified

111825



USB 2.0 Adapter Cable with Bracket

- 2 x USB 5pin to 2 x USB Type A Female
- USB 2.0 compliant
- Foil shielded
- UL certified

128132



Internal Power Supply Cable

- 1 x MOLEX Male to 2 x MOLEX Female
- 0.2m
- UL certified

112030



SATA Power Supply Cable

1 x MOLEX Male to SATA 15pin, 0.15m

112050

1 x MOLEX Male to SATA 15pin + MOLEX Female, 0.3m

112052

1 x SATA 15pin to MOLEX + SATA 7pin, 0.5m

112054

1 x MOLEX Male to SATA 15pin, angled, 0.15m

112055

1 x MOLEX Female to 1 x SATA 15pin Female, 0.15m

112058



High Quality Power Cord

- IEC C13 to C14
- 1.8m
- Reach compliant

112100



High Quality Power Cord

- IEC C13 to Schuko 90°
- 1.8m
- Reach compliant

112120



High Quality Power Cord

- IEC C5 to Schuko
- 1.8m
- Reach compliant

112150



High Quality Power Cord

- IEC C7 to 2pin Euro
- 1.8m
- Reach compliant

112160



High Quality Power Cord

- 2 x IEC C14 to 1 x IEC C13
- 1.6m
- Reach compliant

112210



High Quality Power Cord

- 2 x IEC C13 to 1 x Schuko 90°
- 1.8m
- Reach compliant

112220



DB9 Gender Changer

- DB9 Male to Male, metal

124300

- DB9 Female to Female, metal

124301



HDB15 Gender Changer

- HDB15 Male to Male, metal

124320

- HDB15 Female to Female, metal

124321



Nullmodem Cable

- Serial data transfer
- Shielded
- Knurled screws

1.8m

115060

3.0m

115061



PS/2 Keyboard / Mouse Cable

- Shielded
- Color: white
- Pin out 1:1

1.8m, M/F 118070

3.0m, M/F 118071

5.0m, M/F 118072

10.0m, M/F 118074



Monitor / Mouse Cable

- DB9 Male to Female
- Shielded
- 1:1 pin out
- Knurled screws

1.8m 118100

3.0m 118101

5.0m 118102

6/6pin 128050



FireWire IEEE 1394a Cable

- Double shielded
- Length: 1.8m

6/6pin 128050

6/4pin 128060

4/4pin 128070

Blister Series



UXGA Cable

- 218080 HDB 15 Male to Male, 1.8m
- 218130 HDB 15 Male to Female, 1.8m



HighSpeed HDMI Cable with Ethernet

- 119241 Type A to Type A, 1.0m
- 119242 Type A to Type A, 2.0m
- 119243 Type A to Type A, 3.0m
- 119245 Type A to Type A, 5.0m
- 119247 Type A to Type C, 2.0m
- 119248 Type A to Type D, 2.0m



USB 3.0 Cable

- 128232 A Male to B Male, 1.8m
- 128233 A Male to B Male, 3.0m
- 128224 A Male to Micro 10pin, 1.8m



HDMI to DVI Adapter Cable

- 119222 HDMI Male to DVI (18+1) Male, 2.0m
- 119223 HDMI Male to DVI (18+1) Male, 3.0m
- 119225 HDMI Male to DVI (18+1) Male, 5.0m



USB 2.0 Cable

- 128215 A Male to B Male, 1.8m
- 128217 A Male to B Male, 3.0m
- 128780 A Male to A Female, 1.8m
- 128781 A Male to A Female, 3.0m
- 128223 A Male to Mini 5pin, 1.8m
- 128225 A Male to Mini 5pin, 3.0m
- 128226 A Male to Micro 5pin, 1.8m



DVI-D Dual Link Cable

- 118967 DVI (24+1) Male to Male, 1.8m
- 118968 DVI (24+1) Male to Male, 3.0m
- 118969 DVI (24+1) Male to Male, 5.0m



Cat.5e Patch Cord

- 235417 0.5m
- 235410 1.0m
- 235411 2.0m
- 235412 3.0m
- 235414 5.0m
- 235416 10.0m



DisplayPort Cable

- 119232 DisplayPort Male to Male, 2.0m
- 119233 DisplayPort Male to Male, 3.0m
- 133437 DisplayPort Male to DVI (24+1) Male, 3.0m





Dock Connector to USB Cable

134100 Dock 30pin to USB A Male, 1.2m



Dock to Composite AV Cable

134101 Dock 30pin to Composite + USB A Male, 1.8m



Mini DisplayPort Adapter

- 133432 Mini DisplayPort Male to HDB-15 Female
- 133433 Mini DisplayPort Male to DVI (24+1) Female
- 133434 Mini DisplayPort Male to HDMI Female



DisplayPort to VGA Adapter

133435 DisplayPort Male to HDB-15 Female



DisplayPort Adapter

- 133430 DisplayPort Male to HDMI Female
- 133431 DisplayPort Male to DVI (24+5) Female



Audio Adapter

- 149272 3.5mm Stereo Plug to 2 x 3.5mm Stereo Jack
- 149275 3.5mm Stereo Plug to RCA Jack



HDMI / DVI Adapter

- 118902 HDMI Female to Female
- 118903 HDMI Male to Female
- 118904 HDMI C Male to A Female
- 118905 HDMI D Male to A Female
- 118988 DVI (24+1) Male to HDMI Female
- 118998 HDMI Male to DVI (24+1) Female
- 119945 DVI (12+5) Male to HDB-15 Female



Hubs and Splitters



4-Port USB 3.0 Hub

- Data transfer rate up to 5Gbps
- 1 x upstream and 4 x down-stream ports
- Overvoltage protection
- USB bus-powered or self-powered
- LED indicator for each port
- With 5V / 3A power adapter

128947



4-Port USB 2.0 Slim Hub

- Highspeed USB standard
- 1 x upstream and 4 x down-stream ports
- 2m USB cable for extensive access
- Ultra-slim form factor

128950

128951 with power adapter



7-Port USB 2.0 Hub

- Highspeed USB standard
- 1 x upstream and 7 x down-stream ports
- Overvoltage protection
- USB bus-powered or self-powered
- LED indicator for each port
- With 5V / 4A power adapter

128927



2-Port HDMI Splitter

- Distributes one video image to two displays
- Supports 3D format video transmission
- Powered from HDMI source
- Supports 480i, 480p, 720i, 720p, 1080i and 1080p
- Supports VGA, SVGA, XGA, UXGA mode
- HDCP ready
- Plug-and-play

332712



4-Port HDMI Splitter

- Distributes one video image to four displays
- Supports 3D format video transmission
- Supports 480i, 480p, 720i, 720p, 1080i and 1080p
- Supports VGA, SVGA, XGA, UXGA mode
- HDCP ready
- Plug-and-play
- With 5V / 2A power adapter

332714



8-Port HDMI Splitter

- Distributes one video source to eight displays
- Built with signal amplifier
- Supports 480i, 480p, 720i, 720p, 1080i and 1080p
- Supports VGA, SVGA, XGA, UXGA mode
- HDCP ready
- Plug-and-play
- With 5V / 4A power adapter

332718

Switches



2-Port VGA Cable Splitter

- Distributes one video signal into two displays
- Cascadable up to 4 layers
- Additional USB port for input device
- Supports SVGA, VGA, XGA and multisync monitors
- Bandwidth 450 MHz
- High VGA resolution: 2048 x 1536 / 85Hz
- Supports wide screen displays
- Power supply via USB-Y-cable (0,40m)
- Plug-and-play

332521



2/4/8-Port VGA Splitter

- Distributes one video signal to two / four / eight displays
- Cascadable up to 4 layers
- Video bandwidth 450MHz
- High VGA resolution: 2048 x 1536 / 85Hz
- Supports wide screen displays
- Max cable length 55m (built-in signal amplifier)
- Metal housing for better electromagnetic compatibility
- Power adapter included
- Plug-and-play

332542 (2-Port)

332544 (4-Port)

332548 (8-Port)



USB 3.0 Share Switch

- Data transfer rate up to 5Gbps
- Sharing USB device between 2 PCs
- USB bus-powered
- Plug-and-play

128549



USB 2.0 Share Switch

- Sharing USB device among up to 4 PCs
- Highspeed data rate up to 480Mbps
- Switching via push button or hot-key (PC only)
- LED indicators for selected PC
- USB bus-powered
- Plug-and-play

128542 (2 PCs)

128544 (4 PCs)



USB 2.0 Matrix Switch

- Sharing up to 3 USB devices between 2 PCs
- Highspeed data rate up to 480Mbps
- Switching via push button
- LED indicators for selected PC
- USB bus-powered
- Plug-and-play

128548



HDMI Switch

- Sharing 1 HDMI display among up to 3 sources
- Supports 12bit per channel (36bit all channel) deep color
- Supports 250MHz/2.5Gbps per channel (7.5Gbps all channel) bandwidth
- Multifunctional on switching: intelligent or manually
- Supports full HD 1080p video streams
- Supports uncompressed audio such as LPCM and compressed audio such as DTS Digital, Dolby Digital (including DTS-HD and Dolby True HD)

332702 (2-Port)

332703 (3-Port)



Dual Monitor 4-Port Combo KVM Switch

- Controls 4 dual-video enabled computers from a single console
- Supports PS/2 and USB keyboard / mouse
- 2 USB downstream ports shared by 4 PCs
- Switching via push button or hot keys
- LED display for easy status monitoring
- Supports WUXGA resolutions up to 1920 x 1200 @ 60HZ
- Supports Windows 98/98SE/2000/ME/XP/VISTA/7, Linux, Mac OS9/OSX, SUNMICRO Solaris 8 or later
- Auto-scan with adjustable interval

331544



2-Port USB Cable KVM Switch

- Supports VGA resolutions up to 2048 x 1536 / 85Hz
- Supports wide screen displays
- Supports DDC, DDC2, DDC2B
- LED indicator for selected PC
- USB bus-powered

331522



USB Pocket KVM Switch with Audio

- Supports high resolution up to 2048 x 1536 / 85Hz
- Supports wide screen displays
- Ultra compact case
- Switching via push buttons or hot key
- Adjustable auto scan interval
- Independent/-simultaneous audio & PC switching
- LED indicator for selected PC
- Includes KVM cable sets
- No power supply required

331512 (2 PCs)

331514 (4 PCs)

Computer Peripherals



USB 3.0 All-in-One Card Reader

- Data transfer rate up to 5Gbps
- 5 Slots: CF/MD, SD/mini SD/MMC/RS-MMC, MS/MS-Duo, Micro-SD/M2, xD
- Supports Slot-to-Slot Read / Write
- Supports latest SDXC and Cfast formats
- Icon-display utility for easy recognition
- USB bus-powered, plug-and-play

128553



USB 2.0 All-in-One Card Reader

- Data transfer rate up to 480Mbps
- 6 Slots: CF/MD, SD/mini SD/MMC/RS-MMC, MS/MS-Duo, Micro-SD/M2, xD
- Supports Slot-to-Slot Read / Write
- Icon-display utility for easy recognition

128554



USB 2.0 Mini Card Reader

- Data transfer rate up to 480Mbps
- 3 Slots: SD/mini SD/MMC/RS-MMC, MS/MS-Duo, Micro-SD/M2
- USB bus-powered, plug-and-play
- Pocket size design with protection cap

128506



USB 2.0 6-in-1 Card Reader

- Data transfer rate up to 480Mbps
- 3 Slots: SD/mini SD/MMC/RS-MMC, MS/MS-Duo, Micro-SD/M2
- USB bus-powered, plug-and-play

128505



USB 3.0 3.5" Internal Card Reader

- Data transfer rate up to 5Gbps
- 5 Slots: CF/MD, SD/mini SD/MMC/RS-MMC, MS/MS-Duo, Micro-SD/M2, xD
- One USB 3.0 pass-through port
- Supports slot-to-slot read / write
- Supports latest SDXC and CFast formats
- Icon-display utility for easy recognition
- USB bus-powered, plug-and-play
- Silver bezel for replacement

128580



USB 2.0 3.5" Internal Card Reader

- Data transfer rate up to 480Mbps
- 4 Slots: CF/MD, SD/mini SD/MMC/RS-MMC, MS/MS-Duo, SM/xD
- One USB 2.0 pass-through port
- Supports slot-to-slot read / write
- LED indicator for data access
- Easy to mount, USB bus-powered

128581



eSATA/USB 2.0 Docking Station

- eSATA and USB dual Interface
- Supports both 2.5" and 3.5" SATA HDD
- Highspeed USB data rate up to 480Mbps
- SATA transfer rate up to 3Gbps
- Dust protection cap
- Includes 12V / 2A power adapter

128574



Wireless Presenter (Red Laser)

- PowerPoint presentation control, laser pointer and 360° mouse function combined with a remote control
- Operating range up to 30m indoor and 100m outdoor
- Working range of laser pointer: 40m
- Frequency area: 2400 - 2483 MHz
- 16 channels
- Includes USB receiver and batteries
- Supports OS: Windows 98SE/ME/2000/XP/Vista/7, Mac OS 10 or higher

610023



Wireless Presenter (Green Laser)

- PowerPoint presentation control, laser pointer and 360° mouse function combined with a remote control
- Operating range up to 30m indoor and 100m outdoor
- Working range of laser pointer: 200m
- Green laser point visible under bright and dark environments
- Frequency area: 2400 - 2483 MHz
- 16 channels
- Includes USB receiver, batteries, and carry bag
- Supports OS: Windows 98SE/ME/2000/XP/Vista/7, Mac OS 10 or higher

610026



Wireless Presenter with Flashlight

- Built in flashlight
- Operating range up to 30m indoor and 100m outdoor
- Working range of laser pointer: 40m
- Frequency area: 2400 - 2483 MHz
- 16 channels
- Includes USB receiver and batteries
- Supports OS: Windows 98SE/ME/2000/XP/Vista/7, Mac OS 10 or higher

610027



Wired Office Mouse

- 1000dpi optical sensor
- Left / right buttons and scroll wheel
- Ergonomic design for both hands

245100



Wireless Optical Mouse

- 2.4Ghz wireless
- 1600dpi optical sensor with dpi switch button
- USB nano receiver with store slot
- Effective distance up to 10m

245101

Add-on Cards



SATA III PCIe Combo Card

- One internal SATA port and one eSATA port
- Compliant with 5Gbps PCI Express 2.0 and serial ATA specifications 3.0
- Compatible with SATA I / SATA II / SATA III
- Hot swap capability
- Supports Native Command Queuing (NCQ)
- Low profile PCI form factor
- Two pin headers on board for LED connection

111920



4-Port USB 3.0 PCIe Card

- Supports Low-speed (1.5 Mbps) / Fullspeed (12 Mbps) / High-Speed (480 Mbps) / Super-Speed (5 Gbps) data rate
- Supports USB legacy function
- Compliant with PCI Express base Specification
- Over-current protection
- Supports WIN XP/Vista/7
- External power socket for 900mA per Port

128285



5-Port USB 2.0 PCI Card

- Four external and one Internal USB Ports
- Auto detect speed of connected devices
- Hot swap capability

128281



SATA III 2-Port Express Card

- Two eSATA ports
- Compliant with 5Gbps PCI Express 2.0 and serial ATA specifications 3.0
- Compatible with SATA I / SATA II / SATA III
- Hot swap capability
- Supports Native Command Queuing (NCQ)

111910



2-Port USB 3.0 Express Card

- Supports Low-speed (1.5Mbps) / Fullspeed (12Mbps) / High-Speed (480Mbps) / Super-Speed (5Gbps) data rate
- Supports USB legacy function
- Compliant with Express Card Standard rev. 1.0
- Over-current protection
- Supports WINXP/Vista/7

111832



eSATA / USB 2.0 Express Card

- One eSATA port and one USB Port
- SATA II transfer rate up to 3.0 Gbps
- USB 2.0 data rate up to 480 Mbps
- Express Card/34 form factor
- Supports Win 2000/XP/Vista/7
- Includes eSATA cable 0.3m

111828



2-Port USB 2.0 Express Card

- Two USB Ports
- Highspeed USB up to 480Mbps
- Bus fault detection
- Over-current protection
- Express Card/34 form factor

111827



2-Port eSATA II Express Card

- Two eSATA ports
- Compliant with Express Specification 1.0a
- Two self-contained channels
- SATA II Specification, data transfer rate up to 3Gbps
- Supports SATA Port-multiplier
- Supports Windows 2000/XP/Vista/7, Mac OS 10.4 or above
- supports Legacy Command Queuing (LCQ) and Native Command Queuing (NCQ)

111818



RS232 Serial Port Express Card

- Fully compliant with Express Card specification 1.0
- Express Card/34 form factor module
- Provides 1 x DB9 RS-232 serial port
- Supports transmission rate up to 230 Kbps
- Compatible with Windows 2000/XP/Vista/7

111829

Converters and Extenders



USB 2.0 Datalink Cable

- Transfer / share files by simple drag and drop
- Bi-directional data link
- LED indicator
- Supports Windows 2000/XP/Vista/7

Data Transfer Cable

133338



MHL to HDMI Adapter

- MHL (Mobile High-Definition Link) compliance
- Transmits 1080P HD Video and 7.1 digital surround sound.
- Simultaneous charging by additional Micro USB port
- Supports RCP (Remote Control Protocol)

134103



USB 3.0 to SATA Converter Cable

- Data Transfer Rate up to 5Gbps
- Hot-swappable
- One button backup function
- Supports Windows XP/Vista/7
- Including power adapter and SATA cable

133379

ODD Sharing Cable

133339

Dual PC Bridge Cable

133351

All-in-One Cable

133355



USB 3.0 Active Extension Cable

- Compliant to USB 3.0 specifications
- Plug-and-play
- USB bus-powered
- Supports Windows XP/Vista/7

133405 (5M)

133410 (10M)



USB 2.0 Active Extension Cable

- Compliant to USB 2.0 specifications
- Plug-and-play
- USB bus-powered
- Cascadable up to 3 layers

133336 (5M)

133310 (10M)

133311 (15M)

133335 (20M)



USB Extender

- USB extension via network cable up to 60m
- Plug-and-play
- USB bus-powered

133344



USB 2.0 to Serial Converter

- Compliant to USB 2.0 specifications
- Supports all common RS232 serial port
- Automatic USB protocol handling
- Supports remote wake-up and power management
- USB bus-powered

133382



USB 2.0 Display Extension Kit

- Supports resolution up to 1920 x 1200 (WUXGA)
- Connects up to 6 displays
- Driver auto installation
- Hot-swappable
- Operation mode: extension, mirror, primary
- Including DVI to VGA adapter and DVI to HDMI adapter

128450



USB 2.0 to HDMI Converter

- Fit to TV auto screen fine-tuning
- Supports full HD 1080p video streams
- Connects up to 6 displays
- Hot-swappable

128451



USB to Parallel Converter Cable

- USB Type A male to CN36 male
- Compatible with USB printer device classic spec
- Supports Windows 98/2000/ME/XP/Vista/7

133313



USB to Serial Converter Cable

- USB Type A male to DB9/25 male
- Supports Windows 98/2000/ME/XP/Vista/7, Mac OS 8.6 or above

133315



USB to PS/2 Converter Cable

- USB Type A male to 2 x PS/2 female
- Connects two PS/2 devices simultaneously
- Supports Windows 98/2000/ME/XP/Vista/7, Mac OS 8.6 or above

133326

Monitor Brackets



Desktop Bracket, Tilt and Rotate

- Supports 33-58cm (13"-23") displays
- -15°/+15° up and down tilt
- 360° rotatable
- Supports VESA mount standards: 75 x 75, 100 x 100
- Max. arm reach: 266mm
- Load capacity: 8kg (17.6lbs)

650110



Dual Monitor Desktop Bracket, Tilt and Rotate

- Supports 33-58cm (13"-23") displays
- -15°/+15° up and down tilt
- 360° rotatable
- Supports VESA mount standards: 75 x 75, 100 x 100
- Max. arm reach: 858mm
- Load capacity: 8kg (17.6lbs) per mount

650111



Projector Ceiling Mount

- Composed of aluminum and steel
- -10°/+10° up and down tilt
- 360° rotatable
- Anti-theft design (padlock required)
- Quick and easy installation
- Load capacity: 20kg

650410



Projector Ceiling Mount, Cable Management

- Height adjustable: 40 - 60cm
- Arm length adjustable: 16 - 33cm
- -15°/+15° up and down tilt
- 360° rotatable
- Anti-theft design (padlock required)
- Tool-less cable guide design for easy managing and hiding cables
- Load capacity: 20kg

650411



Universal Flat Panel Bracket

- Supports 33-178cm (13"-70") displays
- Distance from TV to wall: 14.5mm
- Supports VESA mount standards: 100 x 100 / 200 x 200 / 400 x 400 / 600 x 600 / 800 x 800mm
- Load Capacity: maximum 50kg (110lbs)
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650400



LCD Wall Bracket, Fixed

- Vesa mount standard
- Material: steel
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650100 25-81cm (10"-32")



LCD Wall Bracket, Fixed

- Vesa mount standard
- Material: steel
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650200 58-94cm (23"-37")



LCD Wall Bracket, Fixed

- Vesa mount standard
- Material: steel
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650300 81-160cm (32"-63")



LCD Wall Bracket, Tilt

- Vesa mount standard
- Material: steel
- Flexible tilt function
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650201 58-94cm (23"-37")

650301 81-160cm (32"-63")



LCD Wall Bracket, Cable Management

- Vesa mount standard
- Material: steel
- Flexible Tilt and Swivel
- Mounting onto solid brick, concrete or hard wood batten/studs wall
- Tool-less cable guide design for easy managing and hiding cables

650102 25-81cm (10"-32")



LCD Wall Bracket, Tilt and Swivel

- Vesa mount standard
- Material: steel
- Flexible tilt and swivel function
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650101 25-81cm (10"-32")



LCD Wall Bracket, Tilt and Swivel

- Vesa mount standard
- Material: steel
- Flexible tilt and swivel function
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650202 58-94cm (23"-37")



LCD Wall Bracket, Tilt and Swivel

- Vesa mount standard
- Material: steel
- Flexible tilt and swivel function
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650302 81-160cm (32"-63")



Foldable DVD Holder

- Compact foldable design
- Load capacity: 8kg
- Includes safety holder
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650500



Splendid DVD Holder

- Elegant glass surface
- Sturdy aluminum holder
- Load capacity: 8kg
- Mounting onto solid brick, concrete or hard wood batten/studs wall

650501

equip life 2 - 21

equip pro	
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Technical Glossary 70 - 79



Copper Patch Cords

Cat.6A STP Flat Patch Cord

- 32 AWG
- 600 MHz
- OD: 6.0 x 1.9mm
- stranded
- gold plated pins
- molded boot
- strain relief
- with cable length printing on plug
- UL/CUL,TIA/EIA certified
- Typical Application: IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBASE-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM



	white
0.5m	607817
1m	607810
2m	607811
3m	607812
5m	607814
10m	607816

Cat.6A S/FTP Patch Cord

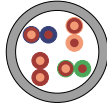
- 26 AWG
- 500 MHz
- stranded
- PIMF (pairs in metal foil)
- halogenfree LSZH
- gold plated pins
- molded boot
- strain relief
- with cable length printing on plug
- UL/CUL,TIA/EIA, 3P certified
- Typical Application: IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBASE-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM



	white	red	blue	green	yellow	grey	orange	black	purple
0.5m	605617	605627	605637	605647	605667	605607	605677	605697	605657
1m	605610	605620	605830	605840	605660	605600	605670	605690	605650
2m	605611	605621	605631	605641	605661	605601	605671	605691	605651
3m	605612	605622	605632	605642	605662	605602	605672	605692	605652
5m	605614	605624	605634	605644	605664	605604	605674	605694	605654
10m	605616	605626	605636	605646	605666	605606	605676	605696	605656
15m	605618	605628	605638	605648	605668	605608	605678	605698	605658
20m	605619	605629	605639	605649	605669	605609	605679	605699	605659

Cat.6 U/UTP Patch Cord

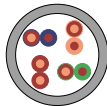
- 26 AWG
- 250 MHz
- stranded
- unshielded
- gold plated pins
- molded boot
- strain relief
- with cable length printing on plug
- UL/CUL, TIA/EIA, ETL certified
- Typical Application: IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM



	beige	red	blue	green	yellow	white	orange	black	pink	purple
0.25m	805513	805523	805533	805543	805563	805503	805573	805593	805583	805553
0.5m	805517	805527	805537	805547	805567	805507	805577	805597	805587	805557
1m	805510	805520	805570	805580	805560	805505	805575	805595	805585	805555
2m	805511	805521	805531	805541	805561	805501	805571	805591	805581	805551
3m	805512	805522	805532	805542	805562	805502	805572	805592	805582	805552
5m	805514	805524	805534	805544	805564	805504	805574	805594	805584	805554
7.5m	805515	805525	805535	805545	805565	815505	815575	815595	815585	815555
10m	805516	805526	805536	805546	805566	805506	805576	805596	805586	805556
15m	805518	805528	805538	805548	805568	805508	805578	805598	805588	805558
20m	805519	805529	805539	805549	805569	805509	805579	805599	805589	805559

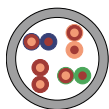
Cat.6 U/UTP Patch Cord Halogen Free

- 24 AWG
- 250 MHz
- stranded
- unshielded
- halogenfree LSZH
- gold plated pins
- molded boot
- strain relief
- with cable length printing on plug
- UL/CUL, TIA/EIA, ETL certified
- Typical Application: IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM



	beige	red	blue	green	yellow	orange	black
0.5m	805617						
1m	805610						
2m	805611	805621	805631	805641	805661	805671	805691
3m		805622	805632	805642	805662	805672	805692
5m	805614	805624	805634	805644	805664	805674	805694

Cat.6 U/UTP Flat Patch Cord



- 30 AWG
- 250 MHz
- stranded
- OD: 6.2 x 1.5mm
- unshielded
- gold plated pins
- molded boot
- strain relief
- with cable length printing on plug
- UL/CUL, TIA/EIA certified
- Typical Application: IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM



	white
0.5m	805817
1m	805810
2m	805811
3m	805812
5m	805814
10m	805816

Cat.6 S/FTP Patch Cord



- 26 AWG
- 250 MHz
- stranded
- PIMF (pairs in metal foil)
- halogenfree LSZH
- gold plated pins
- molded boot
- strain relief
- with cable length printing on plug
- UL/CUL, TIA/EIA, GHMT certified
- Typical Application: IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM

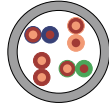


	white	red	blue	green	yellow	grey	orange	black	pink	purple
0.25m	605513	605523	605533	605543	605563	605503	605573	605593	605583	605553
0.5m	605517	605527	605537	605547	605567	605507	605577	605597	605587	605557
1m	605510	605520	605630	605640	605560	605500	605570	605590	605580	605555
2m	605511	605521	605531	605541	605561	605501	605571	605591	605581	605551
3m	605512	605522	605532	605542	605562	605502	605572	605592	605582	605552
5m	605514	605524	605534	605544	605564	605504	605574	605594	605584	605554
7.5m	605515	605525	605535	605545	605565	605505	605575	605595	605585	615555
10m	605516	605526	605536	605546	605566	605506	605576	605596	605586	605556
15m	605518	605528	605538	605548	605568	605508	605578	605598	605588	605558
20m	605519	605529	605539	605549	605569	605509	605579	605599	605589	605559

* 30/40/50m in white also available

Cat.5e U/UTP Patch Cord

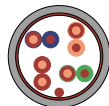
- 26 AWG
- 100 MHz
- stranded
- unshielded
- gold plated pins
- molded boot
- strain relief
- with cable length printing on plug
- UL/CUL, ETL, TIA/EIA certified
- Typical Application: IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM



	beige	red	blue	green	yellow
0.25m	805413	805423	805433	805443	805463
0.5m	805417	805427	805437	805447	805467
1m	805410	805420	805430	805440	805460
2m	805411	805421	805431	805441	805461
3m	805412	805422	805432	805442	805462
5m	805414	805424	805434	805444	805464
7.5m	805415	805425	805435	805445	805465
10m	805416	805426	805436	805446	805466
15m	805418				
20m	805419	805429	805439	805449	805469

Cat.5e F/UTP Patch Cord

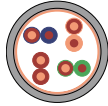
- 26 AWG
- 100 MHz
- stranded
- foil shielded
- gold plated pins
- molded boot
- strain relief
- with cable length printing on plug
- UL/CUL, TIA/EIA, GHMT certified
- Typical Application: IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM



	beige	red	blue	green	yellow	black crossover
0.25m	205413	205523	205533	205543	205463	
0.5m	205417	205427	205437	205447	205467	205917
1m	205410	205420	205430	205440	205460	205910
2m	205411	205421	205431	205441	205461	205911
3m	205412	205422	205432	205442	205462	205912
5m	205414	205424	205434	205444	205464	205914
7.5m	205415	205425	205435	205445	205465	
10m	205416	205426	205436	205446	205466	205916
15m	205418	205428	205438	205448	205468	
20m	205419	205429	205439	205449	205469	205919

Cat.5e SF/UTP Patch Cord

- 26 AWG
- 100 MHz
- stranded
- double shielded
- gold plated pins
- molded boot
- strain relief
- with cable length printing on plug
- UL/CUL, TIA/EIA, GHMT certified
- Typical Application: IEEE 802.3: 10Base-T;
100Base-T; 1000Base-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM



	beige	red	blue	green	yellow	black crossover
0.25m	705413	705429	705439	705449	705469	
0.5m	705417	705427	705437	705447	705467	
1m	705410	705420	705430	705440	705460	705910
2m	705411	705421	705431	705441	705461	705911
3m	705412	705422	705432	705442	705462	705912
5m	705414	705424	705434	705444	705464	705914
7.5m	705415	705425	705435	705445	705465	
10m	705416	705426	705436	705446	705466	705916
15m	705418	705428	705438	705448	705468	
20m	705419	705423	705433	705443	705463	

* 30/40/50m in beige also available

Optical Fiber Patch Cords

LC/LC Optical Fiber Patch Cord

- LC / LC connection
- connector: ceramic-ferrule
- cladding: low smoke and zero halogen
- cable specification: I-VH 2 x 1E (singlemode) / I-VH 2 x 1G (multimode)
- each cable packed with measure protocol
- REACH compliance



	OS2	OM1	OM2	OM3	OM4
core diameter	9/125µm	62.5/125µm	50/125µm	50/125µm	50/125µm
coating color	yellow	orange	orange	turquoise	violette
0.5m			254419	255419	255519
1m	254431	254421	254411	255411	255511
2m	254432	254422	254412	255412	255512
3m	254433	254423	254413	255413	255513
5m	254435	254425	254415	255415	255515
10m	254436	254426	254416	255416	255516
15m	254437	254427	254417	255417	255517
20m	254438	254428	254418	255418	255518

SC/SC Optical Fiber Patch Cord

- SC / SC connection
- connector: ceramic-ferrule
- cladding: low smoke and zero halogen
- cable specification: I-VH 2 x 1E (singlemode) / I-VH 2 x 1G (multimode)
- each cable packed with measure protocol
- REACH compliance



	OS2	OM1	OM2	OM3	OM4
core diameter	9/125µm	62.5/125µm	50/125µm	50/125µm	50/125µm
coating color	yellow	orange	orange	turquoise	violette
0.5m			253319	255329	255529
1m	253331	253321	253311	255321	255521
2m	253332	253322	253312	255322	255522
3m	253333	253323	253313	255323	255523
5m	253335	253325	253315	255325	255525
10m	253336	253320	253310	255326	255526
15m	253337	253327	253316	255327	255527
20m	253338	253328	253318	255328	255528

ST/ST Optical Fiber Patch Cord

- ST / ST connection
- connector: ceramic-ferrule
- cladding: low smoke and zero halogen
- cable specification: I-VH 2 x 1E (singlemode) / I-VH 2 x 1G (multimode)
- each cable packed with measure protocol
- REACH compliance



	OS2	OM1	OM2
core diameter	9/125µm	62.5/125µm	50/125µm
coating color	yellow	orange	orange
1m	252231	252221	252211
2m	252232	252222	252212
3m	252233	252223	252213
5m	252335	252225	252215
10m	252236	252226	252216
15m	252237	252227	252217
20m	252238	252228	252218

LC/SC Optical Fiber Adapter Cable

- LC / SC connection
- connector: ceramic-ferrule
- cladding: low smoke and zero halogen
- cable specification: I-VH 2 x 1E (singlemode) / I-VH 2 x 1G (multimode)
- each cable packed with measure protocol
- REACH compliance



	OS2	OM1	OM2	OM3	OM4
core diameter	9/125µm	62.5/125µm	50/125µm	50/125µm	50/125µm
coating color	yellow	orange	orange	turquoise	violette
0.5m			254319	255319	255539
1m	254331	254321	254311	255311	255531
2m	254332	254322	254312	255312	255532
3m	254333	254323	254313	255313	255533
5m	254335	254325	254315	255315	255535
10m	254336	254326	254316	255316	255536
15m	254337	254327	254317	255317	255537
20m	254338	254328	254318	255318	255538

LC/ST Optical Fiber Adapter Cable

- LC / ST connection
- connector: ceramic-ferrule
- cladding: low smoke and zero halogen
- cable specification: I-VH 2 x 1E (singlemode) / I-VH 2 x 1G (multimode)
- each cable packed with measure protocol
- REACH compliance



	OS2	OM1	OM2	OM3	OM4
core diameter	9/125µm	62.5/125µm	50/125µm	50/125µm	50/125µm
coating color	yellow	orange	orange	turquoise	violette
0.5m			254219	255219	255549
1m	254231	254221	254211	255211	255541
2m	254232	254222	254212	255212	255542
3m	254233	254223	254213	255213	255543
5m	254235	254225	254215	255215	255545
10m	254236	254226	254216	255216	255546
15m	254237	254227	254217	255217	255547
20m	254238	254228	254218	255218	255548

SC/ST Optical Fiber Adapter Cable

- SC / ST connection
- connector: ceramic-ferrule
- cladding: low smoke and zero halogen
- cable specification: I-VH 2 x 1E (singlemode) / I-VH 2 x 1G (multimode)
- each cable packed with measure protocol
- REACH compliance



	OS2	OM1	OM2
core diameter	9/125µm	62.5/125µm	50/125µm
coating color	yellow	orange	orange
1m	252331	252321	252311
2m	252332	252322	252312
3m	252333	252323	252313
5m	252335	252325	252315
10m	252336	252326	252316
15m	252337	252327	252317
20m	252338	252328	252318

Installation Cables



Cat.7 S/FTP Installation Cable

- 23 AWG
- 900 MHz
- solid
- PIMF (pairs in metal foil)
- halogenfree LSZH
- color: orange
- only available in Europe

100m	407431
500m	407435
500m - duplex	407432



Cat.6A S/FTP Installation Cable

- 23 AWG
- 500 MHz
- solid
- double shielded
- PIMF (pairs in metal foil)
- UL/CUL, TIA/EIA certified
- color: beige

100m - PVC	401491
305m - PVC	401493
100m - LSZH	401492
305m - LSZH	401494



Cat.6 SF/UTP Installation Cable

- 23 AWG
- 250 MHz
- solid
- double shielded
- UL/CUL, TIA/EIA certified
- color: beige

100m - PVC	401481
305m - PVC	401483
100m - LSZH	401482
305m - LSZH	401484



Cat.6 F/UTP Installation Cable

- 23 AWG
- 250 MHz
- solid
- single shielded
- UL/CUL, TIA/EIA certified
- color: beige

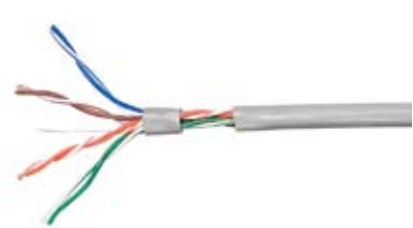
100m - PVC	401471
305m - PVC	401473
100m - LSZH	401472
305m - LSZH	401474



Cat.6 U/UTP Patch Cable

- 24 AWG
- 250 MHz
- stranded
- unshielded
- PVC
- UL/CUL, TIA/EIA, 3P certified
- color: beige

100m	100461
305m	100463



Cat.6 U/UTP Installation Cable

- 23 AWG
- 250 MHz
- solid
- unshielded
- UL/CUL, TIA/EIA certified
- color: beige

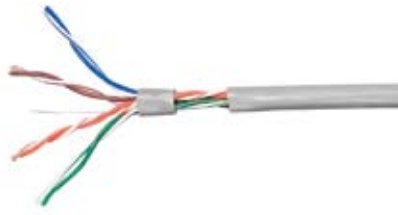
100m - PVC	401461
305m - PVC	401463
100m - LSZH	401466
305m - LSZH	401467



Cat.5e U/UTP Patch Cable

- 26 AWG
- 100 MHz
- stranded
- unshielded
- PVC
- UL/CUL, TIA/EIA certified
- color: beige

100m 100431
305m 100432



Cat.5e U/UTP Installation Cable

- 24 AWG
- 100 MHz
- solid
- unshielded
- PVC
- UL/CUL, TIA/EIA, 3P certified
- color: beige

100m 401411
305m 401413



Cat.5e F/UTP Patch Cable

- 26 AWG
- 100 MHz
- stranded
- single shielded
- PVC
- UL/CUL, TIA/EIA certified
- color: beige

100m 401431
305m 401432



Cat.5e F/UTP Installation Cable

- 24 AWG
- 100 MHz
- solid
- single shielded
- PVC
- UL/CUL, TIA/EIA certified
- color: beige

100m 403421
305m 403429



Cat.5e SF/UTP Patch Cable

- 26 AWG
- 100 MHz
- stranded
- double shielded
- PVC
- UL/CUL, TIA/EIA certified
- color: beige

100m 402431



Cat.5e SF/UTP Installation Cable

- 24 AWG
- 100 MHz
- solid
- double shielded
- PVC
- UL/CUL, TIA/EIA certified
- color: beige

100m 402421
305m 402423



Cat.5e F/UTP Outdoor Installation Cable

- 24 AWG
- 100 MHz
- solid
- single shielded
- double jacket (PVC + PE)
- UL/CUL, TIA/EIA certified
- color: black

305m 403460
500m 403461



Cat.5e F/UTP Outdoor Installation Cable

- 24 AWG
- 100 MHz
- solid
- single shielded
- single jacket (PE)
- UL/CUL, TIA/EIA certified
- color: black

305m 403440
500m 403441



Telephone Installation Cable

- 4 wires
- unshielded
- flat cable
- UL/CUL, TIA/EIA certified
- color: black

100m 117006

Patch Panels



Cat.6A (Class EA) Patch Panel - Shielded

- fully shielded RJ45 Port with dust cover
- Class EA according to ISO/IEC 11801 with better NEXT than TIA/EIA standard
- backward compatible with 10G Ethernet, Cat.6, Cat.5e performance
- 45° dual IDC (LSA and 110) compatible
- incl. support bar
- incl. earthing cable green/yellow
- incl. cable ties
- 19" 1U

color: light grey (RAL 7035)

326524

color: black

326624



Cat.6 (Class E) Patch Panel - Shielded

- Class E according to ISO/IEC 11801 and EN50173
- 45° dual IDC (LSA and 110) compatible
- sheet steel housing with cable entry
- fully shielded
- 19" 1U

color: light grey (RAL 7035)

48-port 326348

color: black

48-port 326448



Cat.6 (Class E) Patch Panel - Shielded

- Class E according to ISO/IEC 11801 and EN50173
- 45° dual IDC (LSA and 110) compatible
- sheet steel housing with cable entry
- fully shielded
- 19" 1U

color: light grey (RAL 7035)

16-Port 326316

24-Port 326324

color: black

16-Port 326416

24-Port 326424



Cat.6 (Class E) Patch Panel - Unshielded

- Class E according to ISO/IEC 11801 and EN50173
- 45° dual IDC (LSA and 110) compatible
- sheet steel housing with cable entry
- 19" 1U

color: black

24-port 135424



Cat.6 (Class E) Patch Panel - Shielded

- Class E according to ISO/IEC 11801 and EN50173
- 45° dual IDC (LSA and 110) compatible
- fast and easy installation
- shielded components
- compact design
- 10" 1U

color: light grey (RAL 7035)

12-port 208014



Cat.6 (Class E) Desktop Patch Panel

- Class E according to ISO/IEC 11801 and EN50173
- 45° dual IDC (LSA and 110) compatible
- suitable for desktop or wall mounting
- metal chassis with cable feed

color : light grey (RAL 7035)

8-port 227368

12-port 227362

Cat.6 (Class E) Patch Panel:

326316 / 326416	326324 / 326424	326348 / 326448	135424	208014	227362	227368
16-port	24-port	48-port	24-port	12-port	12-port	8-port
Shielded	Shielded	Shielded	Unshielded	Shielded	Shielded	Shielded
19" 1U	19" 1U	19" 1U	19" 1U	10" 1U	Desktop / Wallmount	Desktop / Wallmount
Grey / Black	Grey / Black	Grey / Black	Black	Grey	Grey	Grey



Cat.5e Patch Panel - Shielded

- 45° dual IDC (LSA and 110) compatible
- sheet steel housing with cable entry
- fully shielded
- 19" 1U

color: light grey (RAL 7035)

16-port 327316

24-port 327324

color: black

24-port 327424



Cat.5e Patch Panel - Unshielded

- 45° dual IDC (LSA and 110) compatible
- numbered RJ45 Ports, label fields
- color coded LSA terminals clamps according to EIA/TIA 568A/B
- 19" 1U

color: black

16-port 235316

24-port 235324



Cat.5e Patch Panel - Shielded

- 45° Krone IDC compatible
- sheet steel housing with cable entry
- fully shielded
- 19" 1U

color: light grey (RAL 7035)

48-port 327348

color: black

48-port 327448



Cat.5e 12-Port Patch Panel

- 45° dual IDC (LSA and 110) compatible
- fast and easy installation
- compact design
- 10" 1U

color: light grey (RAL 7035)

Shielded 208012

Unshielded 208005



Cat.5e Desktop Patch Panel

- 45° dual IDC (LSA and 110) compatible
- suitable for desktop or wall mounting
- metal chassis with cable feed

color: light grey (RAL 7035)

8-port 227308

12-port 227312



Cat.3 Telephone Patch Panel

- telephone distribution panel
- unshielded
- 19" 1U

color: light grey (RAL 7035)

25-port 125292

50-port 125293

color: black

25-port 125294

50-port 125295

Cat.5e Patch Panel:

327316	327324 / 327424	327348 / 327448	235316	235324	208012	227312	227308
16-port	24-port	48-port	16-port	24-port	12-port	12-port	8-port
Shielded	Shielded	Shielded	Unshielded	Unshielded	Shielded	Shielded	Shielded
19" 1U	19" 1U	19" 1U	19" 1U	19" 1U	10" 1U	Desktop / Wallmount	Desktop / Wallmount
Grey	Grey / Black	Grey / Black	Black	Black	Grey	Grey	Grey



Cat.6A Keystone Patch Panel - Shielded

- snap-in mounting
- incl. support bar
- incl. earthing cable green/yellow
- incl. cable ties
- suitable for shielded keystone jack: 767221
- without jacks
- 19" 1U

color: black

24-port 769324



Cat.6A Keystone Patch Panel - Unshielded

- snap-in mounting
- incl. support bar
- suitable for unshielded keystone jack: 769221
- without jacks
- 19" 1U

color: black

24-port 769225



Cat.6 Keystone Patch Panel - Shielded

- snap-in mounting
- incl. support bar
- incl. earthing cable green/yellow
- incl. cable ties
- suitable for shielded keystone jack: 767210, 767211
- without jacks
- 19" 1U

color: light grey (RAL 7035)

24-port 767124

color: black

24-port 769124



Cat.6 Keystone Patch Panel - Unshielded

- snap-in mounting
- incl. support bar
- suitable for unshielded keystone jack: 769210, 769211
- without jacks
- 19" 1U

color: black

24-port 769224



Cat.6 Keystone Patch Panel - Shielded

- snap-in mounting
- incl. support bar
- incl. earthing cable green/yellow
- incl. cable ties
- suitable for shielded keystone jack: 767210, 767211
- without jacks
- 19" 2U

color: black

48-port 769349



Cat.6 Keystone Patch Panel - Unshielded

- snap-in mounting
- incl. support bar
- suitable for unshielded keystone jack: 769210, 769211
- without jacks
- 19" 2U

color: black

48-port 769249

Keystone Patch Panel:

769324	769225	769349	769249	767124	769124	769224	769248
24-port	24-port	48-port	48-port	24-port	24-port	24-port	48-port
Shielded	Unshielded	Shielded	Unshielded	Shielded	Shielded	Unshielded	Unshielded
1U	1U	2U	2U	1U	1U	1U	1U
Cat.6A, Cat.6, Cat.5e	Cat.6A, Cat.6, Cat.5e	Cat.6, Cat.5e	Cat.6, Cat.5e	Cat.6, Cat.5e	Cat.6, Cat.5e	Cat.6, Cat.5e	Cat.6, Cat.5e



HD Keystone Patch Panel - Unshielded

- snap-in mounting
- incl. support bar
- incl. cable ties
- suitable for unshielded keystone jack: 769212
- without jacks
- 19" 1U
- color: black

48-port 769248



Fiber Optic Patch Panel

- fits 24 x LC duplex adapters or 24 x SC simplex adapters
- 19" 1U
- including screw pack

157180



Passive POE Patch Panel

- Passive PoE application
- Data: pin 1/2&3/6; power: 4/5(+) & 7/8(-)
- Over-current protection
- Fast ethernet connection
- color: black

12-port 328112
16-port 328116



Power Supply Unit

- switching power adapter for PoE patch panel
- over current / voltage protection
- short circuit protection
- power cord included

120W 328120
160W 328160

Outlet



Cat.6A (Class EA) German Modular Faceplate

- 2-port 45°/angled jack with dust cover
- Class EA according to ISO/IEC 11801 and EN50173
- LSA terminals
- horizontal cable feed
- fully shielded
- selling unit: 5pcs/box

color: pearl white (RAL 1013)

125775

color: pure white (RAL 9010)

125772



Cat.6 (Class E) German Modular Faceplate

- 2-port 45°/angled jack
- Class E according to ISO/IEC 11801 and EN50173
- LSA terminals
- horizontal cable feed
- fully shielded
- selling unit: 5pcs/box

color: pearl white (RAL 1013)

125765

color: pure white (RAL 9010)

125762



Cat.5e German Modular Faceplate

- 2-port 45°/angled jack
- LSA terminals
- horizontal cable feed
- fully shielded
- selling unit: 5pcs/box

color: pearl white (RAL 1013)

125722

color: pure white (RAL 9010)

125725



Cat.6 (Class E) German Modular Outlet Set - Retail

- 2-port 45°/angled jack
- Class E according to ISO/IEC 11801 and EN50173
- LSA terminals
- horizontal cable feed
- fully shielded
- incl. back box
- retail packing

color: pearl white (RAL 1013)

125763

color: pure white (RAL 9010)

125761



Cat.5e German Modular Outlet Set - Retail

- 2-port 45°/angled jack
- LSA terminals
- horizontally cable feed
- fully shielded
- incl. back box
- retail packing

color: pearl white (RAL 1013)

125723

color: pure white (RAL 9010)

125721



3-Port German Faceplate - Keystone System

- German surface faceplate for surface mounting box
- 80 x 80mm for three keystone jacks
- incl. modular insert and frame

color: pearl white (RAL 1013)

760304

color: pure white (RAL 9010)

761304



German Faceplate - Keystone System

- German surface faceplate for surface mounting box
- 80 x 80mm for two keystone jacks
- incl. modular insert and frame

color: pearl white (RAL 1013)

760303

color: pure white (RAL 9010)

761303



Universal Faceplate - Keystone System

- universal surface faceplate for surface mounting box
- 80 x 80mm for two keystone jacks
- incl. 45° modular insert and frame
- selling unit: 5pcs/box

color: pearl white (RAL 1013)

760301

color: pure white (RAL 9010)

761301



Surface Mounting Back Box

For modular faceplate

color: pearl white (RAL 1013)

125560

color: pure white (RAL 9010)

125561

For keystone system

color: pearl white (RAL 1013)

760302

color: pure white (RAL 9010)

761302



French Modular Faceplate - Window

- 80.5 x 80.5mm
- 45 x 45mm window
- color: pure white (RAL 9010)

125461



French Modular Faceplate - Insert

- fits 1 x keystone jack
- with dust cover
- color: pure white (RAL 9010)

45 x 45mm 125471

45 x 22.5mm 125474



French Modular Faceplate - Angled Insert

- 45 x 45mm
- with dust cover
- color: pure white (RAL 9010)

1-port 761311

2-port 761312

Tools and Testers



Economy Crimping Tool

- crimps modular connectors 8P/8C
- with stripping and cutting function
- with round cable stripper

129401



Universal Crimping Tool

- crimps modular connectors 6P/4C, 6P/6C, and 8P/8C
- with stripping and cutting function
- with round cable stripper

129403



Professional Modular Crimping Tool

- crimps 4P/2C, 4P/4C, 6P/4C, 6P/6C, 8P/8C, and DEC connectors
- with stripping and cutting function
- with stripping function for round cable
- with ratchet function

129404



Crimping Tool for Hirose Connectors

- crimps shielded Hirose connectors Cat.5e and Cat.6
- simultaneous crimping of connector (8P/8C) and the strain-relief
- with ratchet function

129110



Universal Stripping Tool

- for dismantling of UTP, STP, ISDN, telephone and data cables up to max. 9mm

129102



Fixing Aid

- for keystone jack punch down installation
- plastic

760400



Krone LSA/IDC Punch Down Tool

- press in and punch down function
- cut off function
- for IDC & LSA connector
- only available in Europe

129109



equip LSA/IDC Punch Down Tool

- press in and punch down function
- cut off function
- for IDC & LSA connector

129119



Network / Modular / USB Cables Tester

- master and remote unit
- tests shielding, transmission, short circuit and wiring errors
- extensive diagnostic display for pin-out and pair display for 10BaseT, 100BaseTX, 10Base2, USB
- tests 4/6/8 pin patch cables (RJ11/12/45) as well as installed cables up to 100m

129964



Network Tool Case

- 1 x punch down tool
- 1 x LAN cable tester
- 1 x cable stripper
- 1 x RJ45 crimping tool

129503



Professional Tool Box

- for UTP, STP and telephone cabling
- 1 x crimping tool professional, model no.129404
- 1 x fixing aid for keystone jacks, model no.760400
- 1 x LSA punch down tool
- 1 x universal stripping tool, model no.129102
- 1 x screw driver for crimping tool
- 20 x unshielded Cat.6 RJ45 plug
- 20 x antikink boot in black, model no. 151158

129504

Cabling Accessories



Cat.6A Shielded Keystone Jack Toolless

- Class E_A according to ISO/IEC 11801 with better NEXT than TIA/EIA standard
- fully shielded
- tool free connector
- EIA/TIA 568 coded
- snap-in mounting
- suitable for keystone patch panel 769324
- suitable for wall mounting outlet: 760301, 760303, 761301, 761303
- selling unit: 8 pcs/bag

767221



Cat.6A Unshielded Keystone Jack Toolless

- Class E_A according to ISO/IEC 11801 with better NEXT than TIA/EIA standard
- unshielded
- tool free connector
- EIA/TIA 568 coded
- snap-in mounting
- suitable for keystone patch panel 769225
- suitable for wall mounting outlet: 760301, 760303, 761301, 761303
- selling unit: 8 pcs/bag

769221



Cat.6 Shielded Keystone Jack LSA

- fully shielded
- LSA connector
- EIA/TIA 568 coded
- snap-in mounting
- suitable for keystone patch panel 767124, 769124, 769349
- suitable for wall mounting outlet 760301, 761301, 760303, 761303
- selling unit: 8pcs/bag

767210



Cat.6 Unshielded Keystone Jack LSA

- unshielded
- LSA connector
- EIA/TIA 568 coded
- snap-in mounting
- suitable for keystone patch panel 769224, 769249
- suitable for wall mounting outlet 760301, 761301, 760303, 761303
- selling unit: 8pcs/bag

769210



Cat.6 Unshielded Keystone Jack LSA, Slim Type

- unshielded
- LSA connector
- EIA/TIA 568 coded
- snap-in mounting
- suitable for keystone patch panel 769248
- suitable for wall mounting outlet: 760304, 761304
- selling unit: 8pcs/bag

769212



Cat.6 Shielded Keystone Jack Toolless

- fully shielded
- tool free connector
- EIA/TIA 568 coded
- snap-in mounting
- suitable for keystone patch panel 767124, 769124, 769349
- suitable for wall mounting outlet 760301, 761301, 760303, 761303
- selling unit: 8pcs/bag

767211



Cat.6 Unshielded Keystone Jack Toolless

- unshielded
- tool free connector
- EIA/TIA 568 coded
- snap-in mounting
- suitable for keystone patch panel 769224, 769249
- suitable for wall mounting outlet 760301, 761301, 760303, 761303
- selling unit: 8 pcs/bag

769211



Cat.6A Shielded Modular Inline Coupler

- fully shielded
- 2 x RJ45 jack
- pin configuration: 1:1

221169



Cat.6A Shielded Keystone Inline Coupler

- 2 x RJ45 jack
- pin configuration 1:1
- snap-in mounting
- suitable for Cat.6A keystone patch panel 769324
- suitable for wall mounting outlet 760301, 761301, 760303, 761303
- selling unit: 8 pcs/bag

125596



Cat.6 Shielded Modular Inline Coupler

- fully shielded
- 2 x RJ45 jack
- pin configuration: 1:1

121169



Cat.6 Shielded Keystone Inline Coupler

- 2 x RJ45 jack
- pin configuration 1:1
- snap-in mounting
- suitable for Cat.6 keystone patch panel 767124, 769124, 769349
- suitable for wall mounting outlet 760301, 761301, 760303, 761303
- selling unit: 8 pcs/bag

125589



Cat.6 Unshielded Keystone Inline Coupler

- 2 x RJ45 jack
- pin configuration 1:1
- snap-in mounting
- suitable for Cat.6 keystone patch panel 769224, 769249
- suitable for wall mounting outlet 760301, 761301, 760303, 761303
- selling unit: 8 pcs/bag

125579



Cat.5e Shielded Modular Inline Coupler

- fully shielded
- 2 x RJ45 jack
- pin configuration: 1:1

221159



Cat.6 (Class E) Shielded Junction Box

- Class E according to ISO/IEC 11801 and EN50173
- shielded
- Cat.6 FTP, SFTP installation cables can be extended or reconnected after damage with this module via LSA terminals
- compatible with 110/Krone punch down tools

135620



Cat.5e Shielded Junction Box

- shielded
- Cat.5e FTP, SFTP installation cables can be extended or reconnected after damage with this module via LSA terminals
- compatible with 110/Krone punch down tools

135420



Cat.5e Unshielded Junction Box

- unshielded
- Cat.5e UTP installation cables can be extended or reconnected after damage with this module via LSA terminals
- compatible with dual IDC (LSA and 110) punch down tools

135410



Cat.5e RJ45 Modular Adapter

- shielded
- RJ45 plug to 2 x RJ45 jack
- split 1 x RJ45 port with 15cm cable into 2 x 10/100Base-T
- connection two units are necessary

127603



Cable Boot

- antikink boot for RJ45 plug
- plastic
- selling unit: 100pcs
- color: black

151178



RJ11/12/45 Modular Plug

- for telephone and modem flat cable
- unshielded
- selling unit: 100pcs/bag

4P4C	121111
6P4C	121121
6P6C	121131
8P8C	121151



RJ45 Modular Plug

- for round cable
- unshielded
- 8P8C
- selling unit: 100pcs/bag

Cat.6 without boot	121143
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RJ45 Plug Set

- for round cable
- selling unit: 100 sets

unshielded

Cat.6 with boot, insert bar	121175
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shielded

Cat.6 with boot, insert bar	121178
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Socket Protector

- dust protection
- plastic
- color: black
- selling unit: 100pcs/bag

RJ45 socket protector	151179
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Blind Insert

- suitable for keystone patch panel: 767124, 769124, 769224
- selling unit: 100pcs/bag
- color: black

760402



ISDN Telephone Splitter

- RJ45 plug to 4 x RJ11 jack
- cable length: 175mm
- gold-plated contact
- including double-sided adhesive tape
- color: black

124260



RJ45 Modular Adapter

- RJ45 jack to RJ45 jack
- gold-plated contact
- color: white
- selling unit: 100pcs/bag

121252



Cat.6 (Class E) Surface Mounted Box

- unshielded
- Class E according to ISO/IEC 11801 and EN50173
- according to EIA/TIA 568A/B
- IDC/LSA terminals
- color: pure white (RAL 9010)

1-Port 235211
2-Port 235212



Cat.5e Surface Mounted Box

- unshielded
- according to EIA/TIA 568A/B
- IDC/LSA terminals
- color: pure white (RAL 9010)

1-Port 235111
2-Port 235112



Surface Mounted Box - Keystone System

- unshielded
- color: pure white (RAL 9010)
- with dust cover

1-Port 125121
2-Port 125122



Keystone Box

- modular construction
- plastic housing with up to 12 x keystone jack
- without jacks
- size: 170 x 112 x 38mm
- color: white

125460



Optical Fiber Keystone Adapter

- snap-in mounting
- suitable for keystone patch panel 769224, 769112, 769249
- suitable for equip wall-mount outlets - keystone system
- pre-assembled with optical fiber coupler
- selling unit: 8pcs

LC duplex 125570
ST simplex 125571
SC simplex 125572



ST Adapter/Coupler

- standard adapter for panels and outlets
- suitable for multimode connection
- phosphor bronze sleeve
- snap-in or thread type
- metal sleeve, metal housing

156100



SC Adapter/Coupler

- standard adapter for panels and outlets
- duplex
- phosphor bronze sleeve
- snap-in or thread type
- metal sleeve
- selling unit: 12pcs

singlemode, blue **156131**
OM1/OM2, beige **156145**
OM3, turquoise **156143**



LC Adapter/Coupler

- standard adapter for panels and outlets
- suitable for multimode connection
- duplex
- phosphor bronze sleeve
- snap-in or thread type
- metal sleeve
- selling unit: 12pcs

156150



SC/APC Adapter

- standard adapter for panels and outlets
- suitable for singlemode connection
- zirconia sleeve
- snap-in or thread type
- selling unit: 12pcs

156144



ST Connector

- metal case
- suitable for multimode connection
- zirconia ceramic ferrule
- anti-kink black boot
- selling unit: 12pcs

156010



LC Connector

- polymer housing
- suitable for multimode connection
- beige boot
- selling unit: 12pcs

156021



SC Connector

- polymer housing
- zirconia ceramic ferrule
- selling unit: 12pcs

singlemode, blue

156023



SC Connector

- polymer housing
- zirconia ceramic ferrule
- selling unit: 12pcs

multimode, beige

156020

Cabinet System



Standing Cabinet

- comply with ANSI/EIA RS-310-D, IEC297-2, DIN41494: part 1, DIN41494: part 7, ETSI standard
- material: SPCC cold rolled steel
- thickness: mounting profile 2.0mm, mounting angle 1.5mm, others 1.2mm.
- front door: tempered glass with spring lock; rear door: steel with round lock
- blue zinc mounting profile
- lockable cable entry on top cover and bottom panel
- removable side panels
- shipped in flat packs
- color: black (RAL 9004)

* models other than those listed are on demand

600 x 600mm

18U	896618
27U	896627
42U	896642

600 x 800mm

18U	896818
27U	896827
42U	896842

600 x 1000mm

18U	896118
27U	896127
42U	896142

800 x 800mm

18U	898818
27U	898827
42U	898842
47U	898847

800 x 900mm

18U	898918
27U	898927
42U	898942
47U	898947

800 x 1000mm

18U	898118
27U	898127
42U	898142
47U	898147

Wall Mount Cabinet

- comply with ANSI/EIA RS-310-D, IEC297-2, DIN41497: part 1, DIN41494: part 7, GB/T3047.2-92
- material: SPCC cold rolled steel
- thickness: mounting profile 1.5mm, others 1.2mm.
- front door: tempered glass with round lock
- welded frame
- wall mount or standing installation
- knock out hole as cable entry on top cover and bottom panel
- removable side panels
- color: black (RAL 9004)

Single Section (600 x 450mm)

6U	896406
9U	896409
12U	896412

Double Section (600 x 550mm)

6U	896506
9U	896509
12U	896512

Flat Pack Cabinet

- comply with ANSI/EIA RS-310-D, IEC297-2, DIN41497: part 1, DIN41494: part 7
- material: SPCC cold rolled steel
- thickness: mounting profile 1.5mm, side panels: 0.8mm, others 1.2mm.
- front door: tempered glass with round lock
- wall mount or standing installation
- knock out hole as cable entry on top cover and bottom panel
- removable side panels
- color: black (RAL 9004)

10" (280 x 310mm)

4U	892304
6U	892306
9U	892309
12U	892312

19" (520 x 450mm)

4U	895404
6U	895406
9U	895409
12U	895412



Open Rack

- comply with ANSI/EIA RS-310-D, IEC297-2, DIN41494: part 1, DIN41494: part 7
- modular design
- easy to assemble and disassemble
- color: black (RAL 9004)

42U **890042**
47U **890047**



19" 9-Bay Power Distribution Unit

- 1U horizontal installation
- 9-socket
- power cord specification: 3 x 1.5 mm² x 1.8m
- 16A/250V, max. 3500W
- plastic shell
- color: black

German type (CEE 7/4) **333282**
French type (CEE 7/5) **333284**



19" 8-Bay Power Distribution Unit with Switch

- 1U horizontal installation
- 8-socket
- with on/off switch
- power cord specification: 3 x 1.5 mm² x 1.8m
- 16A/250V, max. 3500W
- plastic shell
- color: black

German type (CEE 7/4) **333283**
French type (CEE 7/5) **333285**



19" 9-Bay Power Distribution Unit, Aluminium Shell

- 1U horizontal installation
- 9-socket
- power cord specification: 3 x 1.5 mm² x 1.8m
- 16A/250V, max. 3500W
- aluminium shell
- color: silver

German type (CEE 7/4) **333292**
French type (CEE 7/5) **333294**



19" 8-Bay Power Distribution Unit with Switch, Aluminium Shell

- 1U horizontal installation
- 8-socket
- with on/off switch
- power cord specification: 3 x 1.5 mm² x 1.8m
- 16A/250V, max. 3500W
- aluminium shell
- color: silver

German type (CEE 7/4) **333293**
French type (CEE 7/5) **333295**



19" 8-Bay Power Distribution Unit, Surge Protection

- 1U horizontal installation
- 8-socket
- with on/off switch
- power cord specification: 3 x 1.5 mm² x 1.8m
- 16A/250V, max. 3500W
- surge protection: 10KA, 250 Joules
- aluminium shell
- color: silver

German type (CEE 7/4) **333296**



19" Master-Slave Power Distribution Unit

- 1U horizontal installation
- 1 master + 5 slave sockets
- power cord specification: 3 x 1.5 mm² x 1.8m
- 16A/250V, max. 3500W
- aluminium shell
- color: silver

German type (CEE 7/4) 333298



19" Power Distribution Unit with Cable Lock

- 1U horizontal installation
- 7-socket
- power cord specification: 3 x 1.5 mm² x 1.8m
- 10A/250V, max. 3500W
- aluminium shell
- color: silver

IEC type (IEC 60320 C13) 333300



10" 3-Bay Power Distribution Unit

- 1U horizontal installation
- 3-socket
- power cord specification: 3 x 1.5 mm² x 1.5m
- 16A/250V, max. 3500W
- plastic shell
- color: black

German type (CEE 7/4) 333299



Power Strip

- outlet standard: CEE 7/4
- 1.80m power cord with C14 IEC320 plug
- max. 2200W
- color: black

3-Bay 333280

4-Bay 333281



Digital Temperature Controller

- metal
- built in sensor
- fan units on demand
- 2-way output
- intelligent control on cabinet inner temperature
- alarm mechanism for abnormal temperature
- color: RAL9004

892201



Rackmount Cooling Unit

- metal
- input: 220V / 50-60Hz
- fan speed: 1600 RPM
- color: RAL 9004

2-fan 892202

3-fan 892203

4-fan 892204

cooling unit with thermostat

2-fan 892212

3-fan 892213

4-fan 892214



Energy Saving Light Tube

- 19" 1U horizontal installation
- power consumption: 8W
- with 1.8m power cord

for standing cabinet: 892410
for wall-mount cabinet: 892411



Blank Panel

- metal
- 19"

color: light grey (RAL 7035)

1U 327502
2U 327522

color: black

1U 327501
2U 327511



Cable Management Panel

- metal
- with 5 plastic cable holders
- 19" 1U

color: light grey (RAL 7035)
327312

color: black

327311



Brush Panel

- metal
- incl. support bar
- 19" 1U

color: light grey (RAL 7035)
327412

color: black
327411



Fixed Shelf

- SPSS cold rolled steel
- perforated
- load capacity: 60kg; load capacity of heavy duty: 100kg
- color: black

600-depth	892060
800-depth	892080
900-depth	892090
1000-depth	892100
600-depth, heavy duty	892061
800-depth, heavy duty	892081
900-depth, heavy duty	892091
1000-depth, heavy duty	892101



Sliding Shelf

- SPSS cold rolled steel
- perforated
- sliding range: 210mm
- load capacity: 20kg
- color: black

600-depth	892062
800-depth	892082
900-depth	892092
1000-depth	892102



Cantilever Shelf

- SPSS cold rolled steel
- perforated
- load capacity: 20kg
- color: black

600-depth	892063
800-depth	892083
1000-depth	892103



Keyboard Tray

- SPSS cold rolled steel
- sliding range: 210mm
- load capacity: 20kg
- color: black

600-depth	892116
800-depth	892118
900-depth	892119
1000-depth	892120



Keyboard Tray with Mouse Panel

- 19" 2U
- SPSS cold rolled steel
- sliding range: 220mm
- load capacity: 20kg
- color: black

892112



Storage Drawer

- SPSS cold rolled steel
- with lock and 2 keys
- depth: 360mm

2U	892122
3U	892123
4U	892124
5U	892125



Cabinet Plinch

- SPSS cold rolled steel
- fixing and lifting up the standing cabinet
- height: 100mm
- removable side panels
- rear panel with cable entry

600 x 600mm	892466
600 x 800mm	892468
800 x 800mm	892488
800 x 900mm	892489
800 x 1000mm	892480



Castor

- orchid zinc
- with brake
- load capacity: 150kg

2" castor	892452
3" castor	892453



Adjustable Feet

- stabilizes the cabinet
- material: steel
- load capacity: 600kg

892454



Cable Management Slot

- SPSS cold rolled steel

color: black

18U	892418
27U	892427
42U	892442
47U	892447



Supporting Rail

- SPSS cold rolled steel
- mounted to support equipments

600-depth	892160
800-depth	892180
900-depth	892190
1000-depth	892200



Metal Cable Ring

- SPSS cold rolled steel
- cable management ring

left-side	892455
right-side	892456

Cabinet System

19" Network Cabinet DELTA S

The equip 19" free standing network cabinet with IP 30 protection has a robust welded construction. High quality processing and the newest technologies ensure a long operating life time. The hinge system enables almost 180° wide opening of the door. The door can be easily removed and mounted for a change of the door opening direction. The vertical 19" rails can be adjusted freely in any depth of the cabinet. This simplifies the mounting of the devices and the configuration of connecting cables. The equip network cabinet offers a welded frame and removable side panels. These panels are standardly fixed to the frame using a lock with unified key in the same way as the rear cover.



Cabinet Rear Cover

Removable side and rear covers are secured with key-operated locks same as the front cover.



Breakout-type Blanking Panels

The large opening with breakout-type blanking panel allows the assembly and disassembly of a fan plate from the outside, without using any screws. The entry openings for cables in the rear part of the cabinet are covered with breakout-type blanking panels too. It is possible to use a blanking panel with a brush in a cable opening to avoid dust penetration. A plastic frame serves to protect cables from damages (both are parts of the package).



Special doors for ventilation units

For this network cabinet a special type of steel sheet door for installation of ventilation units are ordered.

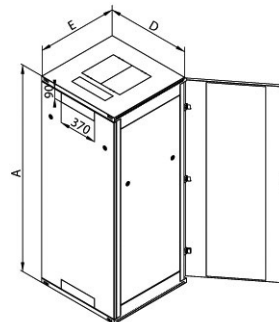
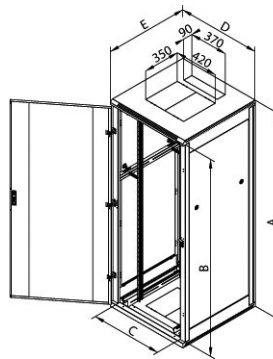


Key Features

- solid construction made of sheet steel
- front door made of tempered safety glass / 180° pivoting, door hinges changeable from right to left
- perforated or full metal door available on request
- lockable handle
- easy removable sides and backplane, lockable
- 2 pairs depth adjustable vertical mounting profiles, galvanized
- cable ducts in backplane, top and bottom with a break-out blanking panel (incl. brush insert)
- slots for ventilation in top and bottom
- perforation in upper and lower parts for optimal ventilation
- mounted grounding system
- height adjustable base (castors pls. see accessories)
- brush insert and mounting material included
- color: RAL 7035 light grey or RAL 9005 black

Door variants

All equip network cabinets come standard with a glass door from 4mm toughened safety glass. Upon request, the cabinets can be supplied with a perforated or solid sheet metal door. In addition, there is the possibility to deliver all of these doors as a two-wing doors.



equip item no.	equip item no.	A	B	C	D	E	U	weight net kg	max. load (recommended) kg
grey	black	mm							
Delta S 600x 600									
906615	996615	770	668	487	600	600	15	33,5	300
906618	996618	900	798	487	600	600	18	37,3	
906622	996622	1080	978	487	600	600	22	42,5	
906632	996632	1525	1423	487	600	600	32	58,1	400
906642	996642	1970	1868	487	600	600	42	71,7	
Delta S 600x 800									
906815	996815	770	668	487	600	800	15	39,1	300
906818	996818	900	798	487	600	800	18	43,3	
906822	996822	1080	978	487	600	800	22	49,1	
906832	996832	1525	1423	487	600	800	32	66,4	400
906842	996842	1970	1868	487	600	800	42	81,5	
Delta S 600x 900									
906918	996918	900	798	487	600	900	18	47,5	300
906932	916932	1525	1423	487	600	900	32	73,9	400
906942	916942	1970	1868	487	600	900	42	90,8	
Delta S 600x 1000									
906132	996132	1525	1423	487	600	100	32	78	400
906142	996142	1970	1868	487	600	100	42	95,6	
Delta S 800x 800									
908815	998815	770	668	687	800	800	15	48,3	300
908818	998818	900	798	687	800	800	18	53	
908822	998822	1080	978	687	800	800	22	59,3	
908832	918832	1525	1423	687	800	800	32	78,2	400
908842	918842	1970	1868	687	800	800	42	94,7	
Delta S 800x 900									
908922	998922	1080	978	687	800	900	22	64,7	300
908927	998927	1300	1198	687	800	900	27	77	400
908932	998932	1525	1423	687	800	900	32	86,3	
908937	998937	1750	1648	687	800	900	37	95,5	
908942	998942	1970	1868	687	800	900	42	104,5	
Delta S 800x 1000									
908022	998022	1080	978	687	800	1000	22	68,4	300
908027	998027	1300	1198	687	800	1000	27	81,2	
908032	998032	1525	1423	687	800	1000	32	90,8	
908137	998037	1750	1648	687	800	1000	37	100,4	400
908042	998042	1970	1868	687	800	1000	42	110	
Delta S 800x 1200									
908232	998232	1525	1423	687	800	1200	32	101,3	400
908242	998242	1970	1868	687	800	1200	42	119,9	

Other configurations and special designs on request

Accessories for 19" Network Cabinet DELTA S

Base for 19" Network Cabinet DELTA S		
item no		WxHxD in mm
grey	black	
922266	992266	600 x120x600
922268	992268	600 x120x800
922269	992269	600 x120x900
922060	992261	600 x120x1000
922288	992288	800 x120x800
922289	992289	800 x120x900
922290	982289	800 x120x1000
922282	992282	800 x120x1200



Accessories for 19" Network Cabinet DELTA S	
item no.	Fan units for base or top cover installation
922447	Stabilizers for Delta S network cabinets, tilt prevention, mounted on the base. 4pcs, RAL 7035 light grey
992447	Stabilizers for Delta S network cabinets, tilt prevention, mounted on the base. 4pcs, RAL 9005 black
922427	4pcs Set of castors, 2pcs with brake, max. load of 4 castors 200kg minus cabinet weight
922437	4pcs Set of castors, 2pcs with brake, max. load of 4 castors 800kg minus cabinet weight



19" wall-mounted Cabinet DELTA 4S

The fully welded wall-mounted cabinet is a classic for medium size installations.



The one-sectioned 19" wall-mounted cabinet with IP 30 protection has a robust welded construction. High quality processing and the newest technologies ensure a long operating life time. The cabinet door is glass standardly but it can be replaced by steel or perforated doors if required. The hinge system enables almost 180° wide opening of the door. The door can be easily removed and mounted for a change of the door opening direction. The vertical 19" rails (1x pair) can be adjusted freely in any depth of the cabinet. This simplifies the mounting of the devices and the configuration of connecting cables.

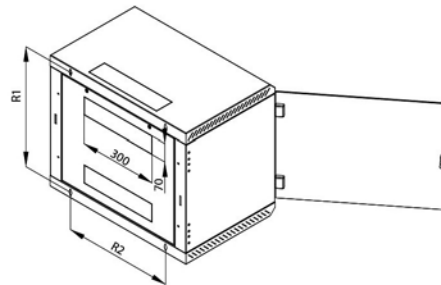
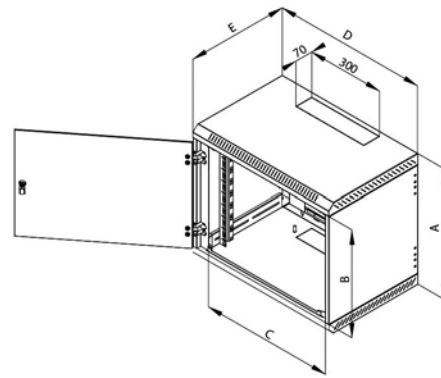
Breakout-type Blanking Panels

The cable openings are covered with breakout-type blanking panels ready in the top, bottom and rear part of the cabinet. Use a plastic frame and a blanking panel with a brush, which is a part of the packaging, to seal the cabinet opening against dust penetration.



Key Features

- solid welded steel construction
- 4 removable cable entries
- slots for passive ventilation
- lockable 5 mm safety hardened glass door
- depth adjustable profile rails
- sheet steel enclosure, color: light grey RAL 7035 or black RAL 9005
- incl. grounding set, brush insert and mounting material
- WxD 600x395mm
- installation depth: max. 340mm



equip item no.	equip item no.	A	B	C	D	E	R1	R2	weight net kg	max. load (recommended) kg
grey	black	mm								
906404	996404	280	175	490	600	395	234	420	12,4	30
906406	996406	370	265	490	600	395	324	420	14,5	
906409	996409	500	395	490	600	395	454	420	17,4	
906412	996412	635	530	490	600	395	589	420	20,5	
906415	996415	770	665	490	600	395	724	420	23,6	
906418	996418	900	795	490	600	395	854	420	26,6	

Other configurations and special designs on request



19" wall-mounted Cabinet DELTA 5D

This cabinet is a very successful version of two-sectioned cabinets. Opening parts of the cabinet enable an easy access to the rear of devices.



The two-sectioned 19" wall-mounted cabinet with IP 30 protection has a robust welded construction. High quality processing and the newest technologies ensure a long operating life time. The cabinet door is glass standardly but it can be replaced by steel or perforated doors if required. The hinge system enables almost 180° wide opening of the door. The door can be easily removed and mounted for a change of the door opening direction. The vertical 19" rails (1x pair) can be adjusted freely in any depth of the cabinet. This simplifies the mounting of the devices and the configuration of connecting cables.

Easy Access

Opening parts of the cabinet enable an easy access to the rear cabinet section. You can easily remove the front part of the cabinet after unlocking chain shackles. All parts are interconnected and earthed.

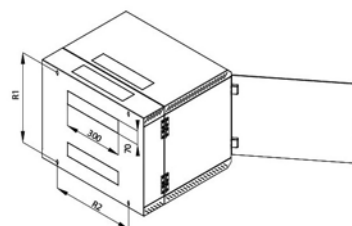
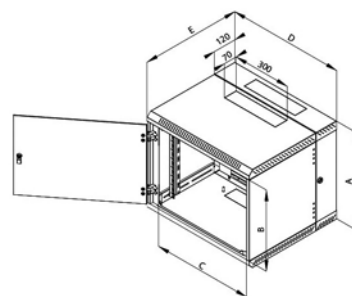


Breakout-type Blanking Panels

The cable openings are covered with breakout-type blanking panels ready in the top, bottom and rear part of the cabinet. Use a plastic frame and a blanking panel with a brush, which is a part of the packaging, to seal the cabinet opening against dust penetration.

Key Features

- solid welded steel construction
- 4 removable cable entries
- slots for passive ventilation
- lockable 5 mm safety hardened glass door
- depth adjustable profile rails
- sheet steel enclosure, color: light grey RAL 7035 or black RAL 9005
- incl. grounding set, brush insert and mounting material
- WxD 600x515mm
- installation depth: max. 440mm



equip item no.	equip item no.	A	B	C	D	E	R1	R2	weight net kg	max. load (recommended) kg
grey	black	mm								
906504	996504	280	175	490	600	515	234	420	15,9	20
906506	996506	370	265	490	600	515	324	420	17,9	
906509	996509	500	395	490	600	515	454	420	21,4	25
906512	996512	635	530	490	600	515	589	420	25,1	
906515	996515	770	665	490	600	515	724	420	28,7	30
906518	996518	900	795	490	600	515	854	420	32,1	

Other configurations and special designs on request

19" Flat Pack Cabinet

This wall-mounted cabinet represents the conception of "flat pack", which means a demountable cabinet that is supplied disassembled.

This 19" wall-mounted cabinet with IP 30 protection offers a high quality processing and the newest technologies to ensure a long operating life time. This cabinet is supplied only with a glass door and a lock. The hinge system enables almost 180° wide opening of the door. The door can be easily removed and mounted for a change of the door opening direction. The vertical 19" rails (1x pair) can be adjusted freely in any depth of the cabinet. This simplifies the mounting of the devices and the configuration of connecting cables.

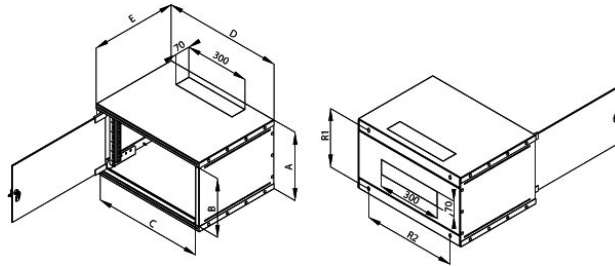
Flat-Pack Concept

Reduce costs of transportation and storage. Together with a unique construction, it contributes to the attractive price while keeping all functional characteristics.

Key Features

- 19" flat pack box
- demountable, compact packing measures
- easy for shipping
- plastic pins are used to join all parts of the cabinet
- the assembly procedure takes only a couple of minutes
- the maximal loading capacity is up to 25kgs
- with lockable glass door
- door for left or right opening
- break out cable entries are located in the top and bottom as well as in the middle of the back side
- all metallic parts of the cabinet are mutually earth connected
- available in RAL 7035 light grey and RAL 9005 black





equip item no.	equip item no.	A	B	C	D	E	R1	R2	weight net kg	max. load (recommended) kg
grey	black	mm								
901004	991004	230	180	505	550	400	180	435	11	25
901006	991006	320	270	505	550	400	270	435	21,4	
901009	991009	410	360	505	550	400	360	435	25,1	
901012	991012	580	530	505	550	400	530	435	28,7	

19" fan units

Fan units for 19" network cabinets

The increasing thermal stress in 19 "network cabinets also requires efficient fan units. Equip offers customized solutions for every application as well.

Key features

- suitable for installation in all equip network and server cabinets
- temperature control from 5 to 55°C via thermostat
- thermostat and mounting material included
- Power connection with power cord (item 112120, not included)
- nominal voltage 230V, 50 Hz
- nominal data per ventilator: 230V, 15W, 50Hz, 0,09A, 160m3/h, 120x120mm
- sheet steel enclosure with on/off switch and safety grid

Fan units for base or top cover installation		
item no.		Description
grey	black	
922117	992117	2 aktive Lüfter
922118	992118	4 aktive Lüfter
922116	992116	6 aktive Lüfter
922119	922120	Montagerahmen für die Installation der Lüftereinheit im Boden



19" horizontal fan units

Key features

- suitable for installation in all equip network and server cabinets
- temperature control from 5 to 55°C via thermostat
- thermostat and mounting material included
- Power connection with power cord (item 112120, not included)
- nominal voltage 230V, 50 Hz
- nominal data per ventilator: 230V, 15W, 50Hz, 0,09A, 160m3/h, 120x120mm
- sheet steel enclosure with on/off switch and safety grid

19" horizontal fan units			
item no.		U	Description
grey	black		
922102	992102	2	2 fans
922104	992104	2	4 fans



item no.	fan-/temperature control
922110	5-60°C Thermostat
112120	power cord 1.8m, angled Schuko plug



19" sheves

19" shelves

- perforated for ventilation
- solid sheet steel, easy mounting
- incl. mounting material

19" shelves				
item no.		U	depth mm	max. load kg
grey	black			
922215	992215	1	150	15
922225	992225	1	250	15
922435	992435	1	350	50
922445	992245	1	450	80
922455	992455	1	550	80
922465	992465	1	650	80
922475	992475	1	750	80



19" heavy duty shelves

- heavy load up to 150kg
- perforated for ventilation
- solid sheet steel, easy mounting
- incl. mounting material

19" heavy duty shelves				
item no.		U	depth mm	max. load kg
grey	black			
922555	992555	1	550	150
922565	992565	1	650	150
922575	992575	1	750	150



19" Sliding shelves

- perforated for ventilation
- solid sheet steel, easy mounting
- incl. mounting material

19" Sliding shelves					
item no.		U	depth mm	max. depth mm	max. load kg
grey	black				
922335	922335	1	350	260	30
922345	992245	1	450	260	30
922355	992355	1	550	550	30
922365	992365	1	650	650	30



19" Drop-down shelf for keyboard

- drop-down
- solid sheet steel, easy mounting
- incl. mounting material

item no.	Lüfter-/ Temperaturregler
922224	204mm depth, 1 U RAL7035 light grey
992224	204mm depth, 1 U RAL9005 black



19" accessories

mounting angles for 19" network cabinets

- support installation of heavy components
- 1 pair
- 2U

19" mounting angles			
item no		DxWxH mm	Description
grey	black		
922601	992601	368x70x88	for 800mm depth cabinets
922801	992801	568x70x88	for 900mm depth cabinets
922901	992901	668x70x88	for 1000mm depth cabinets



cable management rings

- Made of polished stainless steel
- For attachment to the 19" rail
- Improves cable management

cable management rings	item no.	WxD mm
front opening, central fixing	922344	40 x 40
front opening, central fixing	922384	80 x 40
front opening, central fixing	922388	80 x 80
front opening, side fixing	922444	40 x 40
front opening, side fixing	922484	80 x 40
front opening, side fixing	922488	80 x 80
side opening, side fixing	922544	40 x 40
side opening, side fixing	922548	80 x 40
side opening, side fixing	922588	80 x 80



Mounting material

- M6 screws, captive nut and plastic washer

item	Mounting material
no922415	4pcs Set
922423	20pcs Set
922424	50pcs Set



Other accessories on request

19" keyboard drawer 1U

Key features

- very solid keyboard-drawer, painted metal, for 19" cabinet racks
- ball bearing sliding rails
- security lock with two keys
- solid metal handle
- incl. screw-set for installing keyboard-drawer at the front frame of 19" cabinet racks
- optional: two additional mounting rails for installing the keyboard-drawer at the back
- frame of 19" cabinet racks (please see optional accessory below)



19" keyboard drawer 1U		
item no		Description
grey	black	
260410	260420	<ul style="list-style-type: none"> • no keyboard • space for keyboard with max. dimensions 423 (W) x 151 (D) mm
260611	260621	German Layout <ul style="list-style-type: none"> • "normal" sized keys, with integrated Numerical keypad, with Windows-function keys • 2m connection cable • optical trackball 14mm, high resolution, with 2 mouse buttons, integrated in the keyboard • PS2- and USB-connectors
260612	260622	US Layout <ul style="list-style-type: none"> • "normal" sized keys, with integrated Numerical keypad, with Windows-function keys • 2m connection cable • optical trackball 14mm, high resolution, with 2 mouse buttons, integrated in the keyboard • PS2- and USB-connectors
260910	260920	Two mounting-rails incl. screw-set for additional installing of the keyboard-drawer at the back frame of the 19" cabinet rack, fitting for 19" cabinet racks with installation depth 600-900mm (adjustable).



19" Rackmount Server Chassis 4U

Key features

- Lacquered solid steel panel in excellent premium quality
- Robust front-handles and lockable front-door with grey glass for dust proof and security
- One ball bearing 12cm in the front with removable dust filter (hot plug-in)
- Space for two additional 8cm-fans in the back
- Fan-Alarm-Controller-Kit acoustical and LED warning when fan fails
- LED-indicator for power and HDD access
- Shock resistant drive bracket
- Hold-down clamps to protect plug-in cards from vibration
- Suitable for ATX und AT-Mainboards



19" Rackmount Server Chassis 4U		
item no		description
grey	black	
100539	100939	without power supply appropriate bezel for mounting a standard AT(X) power supply is included with the chassis HDD Slots: 3x 5.25" open 1x 3.5" open (with bolted metal panels) 1x 3.5" internal
100544	100944	HQ Server-power supply 400W ATX, PFC, P4, 8cm-fan NoNoise; 230VAC, with Universal-ATXPlug 20/24pin HDD Slots: 3x 5.25" open 1x 3.5" open (with bolted metal panels) 1x 3.5" internal

10" networking components

10" box

The cabinet is often used for the realization of small projects such as home networks or small company networks (SOHO).

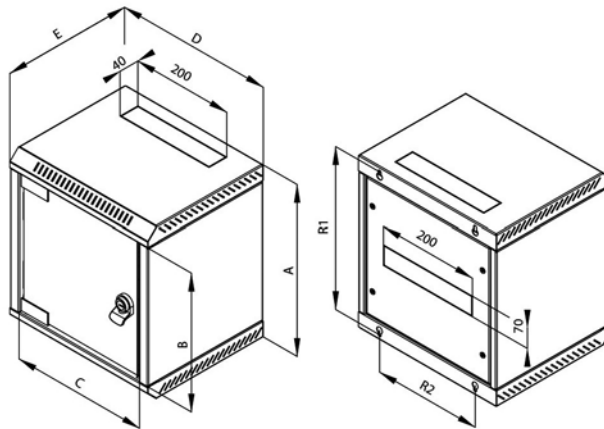
The 10" cabinet has a robust welded construction. High quality processing and the newest technologies ensure a long operating life time. The cabinet door is glass standardly but it can be replaced by steel or perforated doors if required. The hinge system enables a comfortable access.

Application

Ideal solution for installation of 10" components. The cabinet is often used in realizations of small projects such as home networks or small company networks (SOHO). It is a popular accessory of standard 19" cabinets.

Key Features

- pre-installed as modular 10" system
- door with safety glass
- easy and quick installation
- compact design
- W 295 mm / D 260 mm



equip item no	equip item no	A	B	C	D	E	R1	R2	weight net kg	max. load (recommended) kg
grey	black	mm								
907040	997040	248	169	255	310	260	212	212	5,4	20
907060	997060	337	258	255	310	260	301	212	6,9	
907090	997090	470	391	255	310	260	434	212	8,3	

10" Accessories

10" shelves

- perforated for ventilation
- solid sheet steel, easy mounting
- incl. mounting material
- 150mm depth

item no		Description
grey	black	
908000	998000	10" shelf, 1U, 150mm depth



10" Blanking panel

- solid sheet steel, easy mounting
- incl. mounting material

item no		Description
grey	black	
908001	998001	10" Blanking panel, 1U



10" Cable management panel

- 3 small rings
- 1U

item no		Description
grey	black	
908002	998002	10" Cable management panel, 1U



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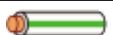




Copper Patch Cords

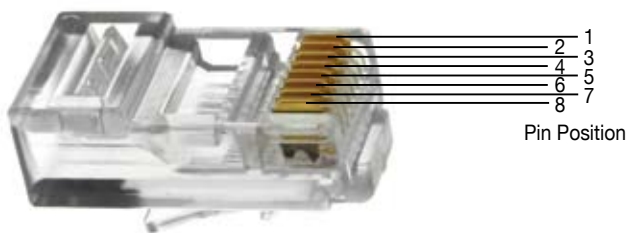
The copper patch cords are composed of four twisted pair of bare copper wires which conduct the electronic pulses smoothly. The eight wires of the patch cords are color-coded according to TIA/EIA 568A or TIA/EIA 568B standard. A cable with T568A at one end and T568B at the other is called a crossover cable, which is catering to connect two computing devices together directly without using a switch or a hub and also used to connect two hubs or two switches on their upstream ports.

TIA/EIA-568 T568A termination

Pin	Pair	Wire	Color
1	3	tip	 white/green
2	3	ring	 green
3	2	tip	 white/orange
4	1	ring	 blue
5	1	tip	 white/blue
6	2	ring	 orange
7	4	tip	 white/brown
8	4	ring	 brown

TIA/EIA-568 T568B termination

Pin	Pair	Wire	Color
1	2	tip	 white/orange
2	2	ring	 orange
3	3	tip	 white/green
4	1	ring	 blue
5	1	tip	 white/blue
6	3	ring	 green
7	4	tip	 white/brown
8	4	ring	 brown



Category and Class

“Category” means something completely different than “Class”. The category applies only on a single component e.g. a cable or an outlet, the component is verified by the labs of the manufacturer or independent verification labs. The class as such always applies to the installed link. The installed link is always tested according to classes.

The international standard ISO/IEC 11801 defines several classes of twisted-pair copper interconnects, which differ in the maximum frequency for which a certain channel performance is required:

Class D: up to 100 MHz using elements category 5e

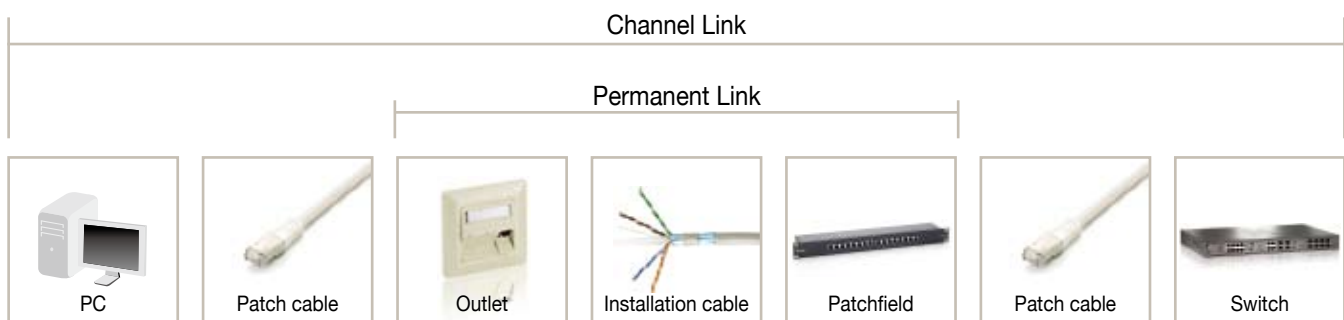
Class E: up to 250 MHz using elements category 6

Class E_A: up to 500 MHz using elements category 6_A

Class F: up to 600 MHz using elements category 7

Class F_A: up to 1000 MHz using elements category 7_A

The comparison of two different routes of cabling is drawn below:



The Permanent Link covers the horizontal installation which includes the installation cable, patch panel, and the outlet or junction box at the other end. The Channel Link covers the patch cords as well as the components of permanent link. A set of measurements is defined in the ISO/IEC standard to unify the quality of structured cabling.

- Return Loss (RL)

The Return Loss is the measurement of the amount of signal that is reflected back toward the transmitter. The reflection of the signal is caused by the variations of impedance in the connectors and cable and is usually attributed to a poorly terminated wire. The greater the variation in impedance, the greater the return loss reading is.

- Attenuation-to-Crosstalk Ratio (ACR)

Attenuation-to-Crosstalk ratio (ACR) is the difference between the signal attenuation produced and NEXT. The ACR indicates how much stronger the attenuated signal is than the crosstalk at the destination (receiving) end of a communications circuit.

- Power Sum ACR (PSACR)

The difference from the ACR is PSACR used PSNEXT in the calculation rather than NEXT.

- Near-End Cross Talk (NEXT)

It is the difference in amplitude (in dB) between a transmitted signal and the crosstalk received on other cable pairs at the same end of the cabling. Higher NEXT values correspond to better cabling performance.

- Power Sum NEXT (PSNEXT)

Power Sum NEXT (PSNEXT) is the sum of NEXT values from 3 wire pairs as they affect the other wire pair.

- Far-End Crosstalk (ELFEXT)

FEXT is very similar to NEXT, but happens at the receiver side of the connection.

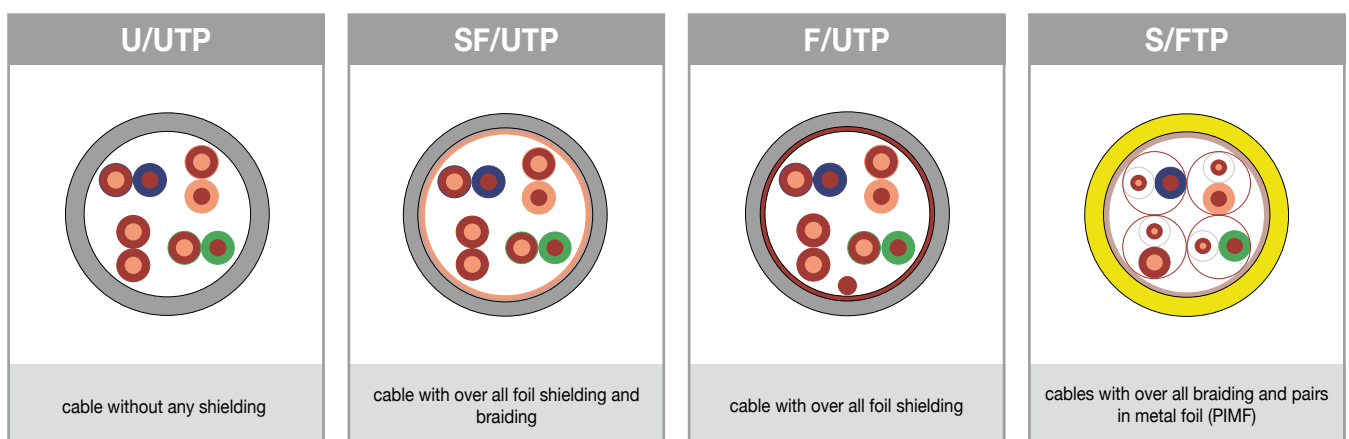
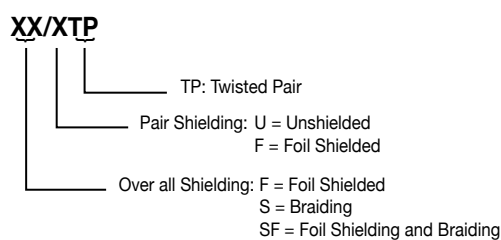
- Equal Level Far End Crosstalk (ELFEXT)

Equal Level Far End Crosstalk (ELFEXT) is a length-independent value for the transmission quality, which defines the ratio of the crosstalk output level to the actual output level. The second pair of wires strewn on the noise level is compared to the starting level.

- Power Sum ELFEXT (PSELFEXT)

Power Sum ELFEXT (PSELFEXT) is the sum of ELFEXT values from 3 wire pairs as they affect the other wire pair.

The Construction of Cable



The equip® copper patch cords are composed of bare copper which is sustainable under the most strict environments. The aluminum foil and braiding further secure the signals from electromagnetic disturbances and guarantee the quality of transmission.

The material of cable jacket can be PVC or LSZH (Low Smoke, Zero Halogen) compound. The level of flame standard is defined by UL organization:

Class	Phrase	Test
CMP	Communications Plenum	Steiner Tunnel Test
CMR	Communications Riser	Riser Flame Test
CM	Communications General purpose	Vertical Tray Flame Test
CMG	Communications	Vertical Tray Flame Test
CMX	Communications Residential	Vertical Wire Flame Test

The equip patch cords are compliant to or above CM level.

Optical Fiber

An optical fiber system transmits the data using light pulses down the fiber lines instead of electronic pulses as the copper connections do. This means of communication is gradually replacing copper networking due to the relative low maintenance cost. The light travels through the fiber lines easily because of the principle known as the total internal reflection, which indicates that when the angle of incidence exceeds a critical value, light cannot get out of the glass; instead, the light bounces back in.

The way the ray disperses varies with the diameter of the glass fiber. In the thicker fiber line (50-100 μ m), the light is reflected in a zigzag pattern, and thus a higher attenuation occurs. The connection can be divided into two types based on the core of fiber line.

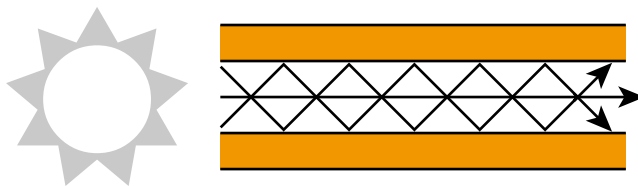
Single Mode Cable is constructed of a single strand of glass fiber with a diameter of 8.3 to 10 μ m. The smaller core eliminates the distortion of light wave and causes less attenuation. Therefore, it carries a higher bandwidth and sustains a longer distance (>1000m) than a multimode fiber cable does, but the cost is higher as well.

"Single mode fiber"
single path through the fiber



Multi Mode Cable has, on the other hand, a thicker core normally between 50 to 100 μ m. Typical core diameters of optical fiber patch cords are 50 μ m (OM2, OM3, OM4) and 62.5 μ m (OM1). The multi mode optical fibers feature attenuation is higher compared to the single mode cables but are able to offer a high bandwidth within a medium distance. As a result, the multi mode cables are more preferable in the deployments with a short range

"Multimode fiber"
multiple paths through the fiber



	Multi Mode								Single Mode		
	OM1		OM2		OM3		OM4		OS1 / OS2		
Core Diameter (μ m)	62.5		50		50		50		9		
Cladding Diameter (μ m)	125		125		125		125		125		
Wavelength (nm)	850	1310	850	1310	850	1310	850	1310	1310	1550	
Max. Attenuation (dB/km)	2.9	0.7	2.4	0.7	2.5	0.7	2.4	0.6	0.34	0.19	
Max. Transmission	1Gbps	300m	500m	500m	500m	1000m	500m	1000m	500m	10km	50km
	10Gbps	30m	220m	80m	220m	300m	220m	500m	220m	10km	40km

Construction of Optical Fiber Cable



Types of Optical Fiber Cables

There are types of cables used in different application. Please contact us for those not listed in this catalog.

- Pigtails

Normally applied to the connection between outdoor cables and indoor splicing boxes, the pigtail is constructed with a Simplex fiber core of 900µm buffered with one assembled connector to an open end.



- Patch Cords

The patch cords are assembled with a connector at each end, ready for direct snap-in.



- Breakout Cables

Two simplex cables covered in one sheath, suitable for indoor installation with duct and conduit.

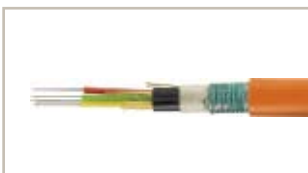


- Outdoor Cables

Covered by UV-resistant, rodent resistant, and waterproof material, the cable is suitable for underground deployment.

Connector Type of Optical Fiber Patch Cords

The most commonly used connectors are LC, SC, and ST, especially the LC connector due to its compact size. The other types of connectors, however, are utilized in different scenarios.



				
Name	MTRJ	LC	SC	ST
Ferrule Diameter	2.45×4.4 mm	1.25 mm	2.5 mm	2.5 mm
Standard	IEC 61754-18	IEC 61754-20	IEC 61754-4	IEC 61754-2
Typical Application	Duplex multimode connections	High-density connections, SFP transceivers, XFP transceivers	Datacom and telecom; GBIC	Multimode, rarely single-mode

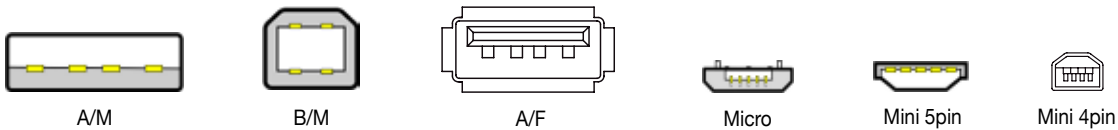
USB

Universal Serial Bus (USB) is an industrial standard that defines the cables, connectors and communication protocols used for connection, communication and power supply between computers and electronic devices.

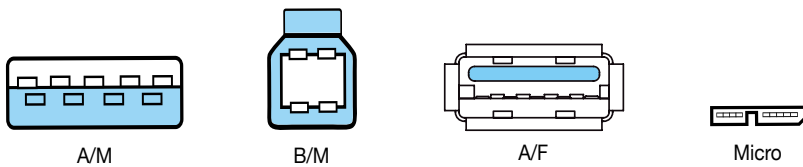
Along with the introduction of USB specifications, the connections of computer peripherals such as mouse, keyboards, printers, and external storages have been standardized. Several connectors have also been developed to adapt the application on different devices, for examples, the smart phones and digital cameras.

Here are the connectors most commonly used:

USB 2.0 / 1.1



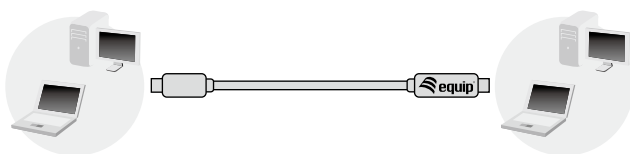
USB 3.0



USB 3.0 is the state-of-the-art technology that increases the maximum transmission rate to 5Gbps and raises the power supply up to 900mA, fulfilling the demand for higher data rate and charging USB peripherals.

	USB 3.0	USB 2.0
Bandwidth	SuperSpeed (5Gbps) / Hi-Speed (480Mbps) / Full Speed (12Mbps) / Low Speed (1.5Mbps)	Hi-Speed (480Mbps) / Full Speed (12Mbps) / Low Speed (1.5Mbps)
Data Interface	Simultaneous bi-directional data flow	Unidirectional data flow with negotiated directional bus transfer
Bus power	Up to 900mA	Up to 500mA
Cable Signal Count	6. 4 for SuperSpeed and 2 for non-SuperSpeed path	2

Active USB Datalink



equip PN			
133338 Data Transfer Cable	•		
133339 ODD Sharing Cable		•	
133351 Dual PC Bridge Cable	•		•
133355 All-in-One Cable	•	•	•

The equip Datalink cables feature a simple drag-and-drop function for two PCs to share files, input devices, and/or optical drives. With no need to install a driver, a window pops up when the cable is connected and meanwhile these sharing functions are ready to use. This cable is especially suitable for those who have one PC and one netbook / tablet which is seldom equipped with an optical drive and lower storage capacity. Simply have two computers connected, the user can access to both devices easily.

Video Interface

HDMI

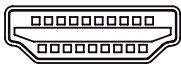


HDMI (High-Definition Multimedia Interface) is a digital interface transmitting both video and audio signals. HDMI 1.4 was released in 2009 and the most significant features introduced in the latest version include a higher resolution of 4k x 2k, an HDMI Ethernet Channel (HEC) which allows two HDMI devices to share one internet connection, an Audio Return Channel (ARC), 3D over HDMI, and a new micro connector specifically for mobile equipments.

Along with the release of HDMI 1.4, the version number is no longer applicable for the product description but instead a set of naming rule is followed:

- Standard HDMI Cable – supports up to 1080i and 720p
- High Speed HDMI Cable – supports 1080p, 4k x 2k, 3D and Deep Color
- Standard HDMI Cable with Ethernet – supports up to 1080i and 720p and HEC
- High Speed HDMI Cable with Ethernet– supports 1080p, 4k x 2k, 3D and Deep Color and HEC

As the latest standard raised the maximum resolution up to 4096 x 2160p@24Hz, which can be used with digital theaters, the application and penetration of HDMI is growing quickly and solutions to connect with the previous standards are needed. HDMI is compatible to the other digital video interfaces such DVI-D, DVI-I and DisplayPort, yet needs an active component to convert the analog signal, like VGA.

HDMI Connectors

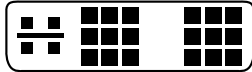
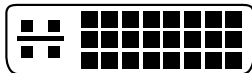
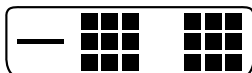
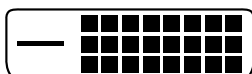
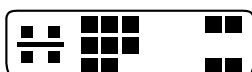
Type	Application
A 	TV, Monitor, Projector, BD/DVD Player, PC
C 	Digital Camera, Camcorder, Tablet
D 	Mobile Phone, Tablet

DVI

DVI (Digital Video Interface) is the only widespread standard that includes both analog and digital video data via one connector. Like HDMI, it carries uncompressed video data yet is partially compatible because it doesn't transmit audio signal. There are 3 versions:

- **DVI-I** for both digital and analog signals, dual-link (24+5) and single-link (18+5)
- **DVI-D** for digital signal only, dual-link (24+1) and single-link (18+1)
- **DVI-A** for analog signal only (12+5)

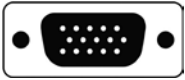
The bandwidth of dual-link is higher but de-facto limited by the copper wire. Here is the nominal bandwidth of these two specifications.

Single-link	<ul style="list-style-type: none"> • HDTV (1,920 × 1,080) @ 60 Hz • UXGA (1,600 × 1,200) @ 60 Hz • WUXGA (1,920 × 1,200) @ 60 Hz • SXGA (1,280 × 1,024) @ 85 Hz • WXGA+ (1440 × 900) @ 60 Hz • WQUXGA (3,840 × 2,400) @ 17 Hz 		DVI-I (Single Link)
			DVI-I (Dual Link)
Dual-link	<ul style="list-style-type: none"> • QXGA (2,048 × 1,536) @ 75 Hz • HDTV (1,920 × 1,080) @ 85 Hz • WUXGA (1,920 × 1,200) @ 120 Hz • WQXGA (2,560 × 1,600) @ 60 Hz • WQXGA (2,560 × 1,600) @ 60 Hz • WQXGA (2,560 × 1,600) @ 60 Hz • WQUXGA (3,840 × 2,400) @ 33 Hz 		DVI-D (Single Link)
			DVI-D (Dual Link)
			DVI-A

VGA

The VGA (Video Graphics Array) connector is a 3-rowed 15pin connector that carries analog video signal. It is also called D-Sub, DE-15, DB-15, HD-15(High Density) and HDB-15. The resolution a VGA cable supports ranges from 640×400 @70 Hz to 2048×1536 @85 Hz, depending on the bandwidth and cable quality.

VGA is the most commonly used video interface but was announced a phase-out by 2015. Intel and AMD are going to cease supporting VGA and accelerate the adoption of DisplayPort and HDMI.

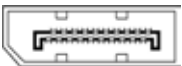


DisplayPort

The DisplayPort standard is developed by Video Electronic Standards Association (VESA) and it carries both video and audio signals. It is designed to replace the DVI and VGA interfaces. The interoperability of DisplayPort and HDMI allows the users to connector these two interfaces with a simple passive adapter or cable.

The maximum resolution DisplayPort supports is WQUXGA (3840 x 2400), though it is actually depending on the bandwidth and graphic.

In the latest graphic cards version 1.2, the Apple Inc.'s Mini DisplayPort connector was formerly listed for the compatibility. This compact connector is widely used in Apple laptops and further announced as the physical interface of latest transmission standard – thunderbolt, which features a bidirectional data transfer rate up to 10Gbps and power supply up to 10 watts.



DP



Mini DP



Digital Data Communications Group

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