

Actassi Cat 6<sub>A</sub> Network Connectivity



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Take charge of tomorrow's data requirements today. Our Actassi

# lat 6<sub>A</sub>

solutions enable longlasting performance and optimised ROI.

Link type	Bit rate (Gbits)	Cost/link (Index*)	Estimated lifetime	Cost/ year
Cat 6 <sub>A</sub> F/FTP MX	10	100	10 years	1.0**
Cat 6 <sub>A</sub>	10	92	7 years	1.3

<sup>\*</sup>Cost/link: Cat 6<sub>A</sub> F/FTP MX = Index 100

High-end systems are 30% more cost efficient

### Actassi S-One and CL-MX. The perfect match.

Actassi S-One RJ45 connectors, the CL-MX cables and the flat high-density panel are all important parts of our total Cat 6<sub>A</sub> solution. Innovations like these enable faster installations, improved energy efficiency and more reliable operation.

#### Actassi CL-MX

Patented metallic crossfiller for superior EMC and reduced installation time.

- 1 Inner cross
- 2 Outer shielding
- 3 Double outer shielding
- 4 More copper for lower power consumption
- Slim design for better cooling and 20% more filling.



### 3x improved performance

### The Actassi CL-MX Cat 6<sub>A</sub> cable

Three times shielding, faster installations and increased efficiency are the major advantages resulting in three times improved performance. The patented crossfiller is wrapped in one single foil, enabling remarkable benefits, such as minimum of cutting and maximum quality of the cable preparation. Also, thanks to the excellent shielding properties, the Actassi CL-MX cable provides outstanding link performance.

### Connecting is a swift operation

### The Actassi S-One RJ45 connector

Together with the CL-MX cable, the S-One connector allows you to handle connections faster. Just insert the cable, close, cut and shut. The innovative one-piece design, automatic 360° cable earthing and smart locking function are features that make the S-One connector suitable for all kinds of applications and a joy for every installer.

Actassi S-One DPM



### Actassi S-One DPM with one-piece design for faster and safer installations

Without any loose parts the Actassi S-One DPM connector is more compact, easier to handle and ensures great performance by making each connection 100% reliable. The connector is delivered open, ready to connect. It has an automatic 360° cable earthing, a simple locking termination and a very smart locking function. The robust one-piece design is suitable for all applications, and in the Actassi S-One DPM range you'll find both unshielded and shielded connectors.



PoE++

The Actassi S-One DPM connector is now certified and fully compliant with the PoE++ standards by Delta, allowing transport of up to 100 W in the data cable.



Ready...

S-One DPM is delivered open. Just insert the cable in the central U-shaped entry.



Steady...

Close the smart bridle - it will automatically lock the cable and provide 360° earthing.



Done.

Shut the connector. A "click" confirms that it's locked into its firm and reliable position.

NOTE: Cable Sheath colour is for illustrative purposes only, cable sheath in offer is blue.



# Actassi S-One DPM benefits

### U-shaped cable entry with a smart bridle

Despite being compact in size, the connector has enough space inside for your work. All functions are designed to ease your installation.

# Safe and automatic 360° earthing

Actassi S-One DPM easily provides automatic earthing without any tools.

### Protected IDC

With Actassi S-One DPM it's nearly impossible to damage cables or fingers, since the IDC is concealed in a cavity.



Insulated plastic IDC housing eliminates short-circuit between conductors and metal body.





Smart bridle with elastomer insert for cable locking reduces risk of damaging cables.

U-shaped cable entry. Easy access for all cables.



Central cable entry for optimised performance.



Automatic 360° earthing with spring-loaded locking and earthing bridle.



Integrated earth-drain contact provides double earthing.

### Ergonomic design



Installing shouldn't be painful! So in the Actassi S-One DPM range it isn't.

Bridle with elastomer insert (unshielded) for convenient locking and soft touch.

Smooth design with rounded edges.

Touch-friendly materials.



Re-open in two clicks

You can hear the

opening and closing.

Actassi S-One DPM

Quick-release buttons for tool-less re-opening.

Reduced risk of damaging connections.

Re-close with a simple click-click.

# Actassi Copper solution

### Connectors S-One DPM

- Performance categories: 6A, unshielded and shielded
- Material: unshielded in ABS plastic, shielded in zamak
- Size: height 28 mm, width 18 mm, depth 35 mm
- · Applicable standards:
- ISO/IEC 11801: 2011 Ed2.2, class EA permanent link and channel
- IEC 60603-7-51 Cat 6<sub>A</sub> connecting hardware
- ANSI/TIA-568-C.2 Cat 6<sub>A</sub> connecting hardware
- One-piece design and U-shaped cable entry
- Tool-less IDC termination
- Earthing (shielded): metallic, 360° self-adjusting, plus drain wire contact
- Operational temperature range: -40°C to + 70°C.

### S-One DPM C6<sub>A</sub>-Cat 6<sub>A</sub>



Description	Qty/pack	Ref. No
RJ45 Connector Cat 6 <sub>A</sub> unshielded DPM	1	VDIB1771XU12
RJ45 Connector Cat 6 <sub>A</sub> unshielded DPM 40 Mech	1	VDIB177AXU10TN







30 mech adapter 1 VDIB27730MWE

### Actassi CL-MX cables

# 3 times improved performance with 1 new metallic crossfiller

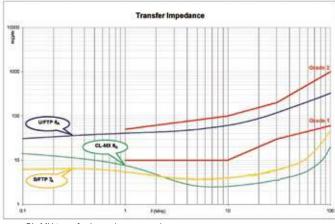
The patented crossfiller brings 3x shielding and superior Electro Magnetic Compatibility (EMC). Thanks to the unique design, the EMC performance is among the best in the market with performances exceeding the standard requirements for shielded cables with braid (S/FTP). The metallic crossfiller ensures an improved transfer impedance to fit requirements of sensitive areas where data transmission is critical. Best of all, Actassi CL-MX cables require less operations to be installed.



# Superior headroom and bandwidth, exceeding international and local standards.

### Designed for improved EMC

High-speed transmission protocols beyond 10 Gbit/s highlight ANEXT sensitivity and noise immunity as key performance factors for efficient, secure and robust installations. The single-foil structure of the metallic crossfiller acts like a triple screen protection around the copper twisted pairs. This specific design enhances EMC performances to reach grade 1 on the transfer impedance parameter, which is better than a shielded design with braid.



CL-MX transfer impedance graph



### Better link performance

With Actassi CL-MX the installations are easy and safe. According to the international standards for shielded LAN cables, the use of CL-MX cables will require less installation operations:

- No ANEXT field testing



The fire properties are documented by standardised methods according to IEC 60332-1, IEC 60332-3C, IEC 60754-1 and IEC 60754-2

### Improved safety in case of fire

Actassi CL-MX is available in the flame retardant LSZH. In case of fire, the result of using CL-MX is the reduction of the emissions of opaque smoke and acid gases. Thus, it helps reducing damages to equipment and allows people to escape from the building more easily.



### Less cutting with Actassi CL-MX

Three times faster installation with Actassi CL-MX



Use the cable stripper tool and cut the outer sheath.



Cut the one crossfiller and remove it with a simple grip.



Your CL-MX is single foil metallic ready to connect.

Instead of separate wrapped-in foil pairs (like in traditional F/FTP or F/UTP cables), the Actassi CL-MX new crossfiller is wrapped in one single foil. This means less cutting and improved quality of the cable preparation. No need to pay attention to cutting the foils at exactly the same level, or to the length of the F/UTP plastic cross.

### Why traditional F/FTP cables are 3 times slower to install



Prepare your tools.



Use the cable stripper tool and cut the outer sheath.



outer foil.



Remove the foil.



Separate all pairs and the drain wire.



Cut and remove the foil of the first pair.



Cut and remove the foil of

pair.



Cut and remove the foil of the the second third pair.



Cut and remove the foil of the fourth pair.

# Actassi Copper solution

# CL-MNC Copper LAN cables Range

### Cat 6<sub>A</sub> U/UTP

#### **Specifications**

- 100 Ohms, 500 MHz, AWG 23, 4 pairs without screen. Crossfiller to organise the pairs.
- · Specific notched sheath
- NVP = 65 %

#### Performances

 Compliant to EN 50173-1, ISO/IEC 11801: 2011 Ed2.2, IEC 61156-5 Ed2 standards

Frequency	NEXT	
500 MHz	35.8 dB	

#### Use

 Network cabling systems for category 6<sub>A</sub> voice & data applications. High data rates transmission: 10 Gigabit Ethernet, Gigabit Ethernet, 10/100 BaseT.

Type	Weight	Diameter	Sheath	Cond/Length	Ref. No
4 pair cable	23 kg	8.5 mm	CM	305 m	ACTTG4P6AUCM3RBU

### Cat 6<sub>A</sub> F/UTP

### **Specifications**

- 100 Ohms, 500 MHz, AWG 23, 4 pairs and 2x4 pairs with overall screen
- NVP = 70 %

### Performances

 Compliant to EN 50173-1, ISO/IEC 11801: 2011 Ed2.2, IEC 61156-5 Ed2 standards.

Frequency	NEXT
500 MHz	35.8 dB

### Use

 Network cabling systems for category 6<sub>A</sub> voice & data applications. High data rates transmission: 10 Gigabit Ethernet, Gigabit Ethernet, 10/100 BaseT.

Type	Weight	Diameter	Sheath	Cond/Length	Ref. No
4 pair cable	17.5 kg	7.5 mm	CM	305 m	ACTTG4P6ASCM3RBU

### Cat 7 F/FTP

### **Specifications**

- 100 Ohms, 600 MHz, AWG23, 4 pairs with individual screen and overall screen
- NVP = 72 %

### Performances

Compliant to ISO/IEC 11801: 2011 Ed2.2, IEC 61156-5 Ed2 standards.

#### Use

 Network cabling systems for category 6<sub>A</sub> voice & data applications. High data rates transmission: 10 Gigabit Ethernet, Gigabit Ethernet, 10/100 BaseT.

Type	Weight	Diameter	Sheath	Cond/Length	Ref. No
4 pair cable	17 kg	7.1 mm	LSZH	305 m	ACTTG4P7FFLS3RWE













# Actassi Copper solution

# CL-MX Copper LAN cables Range

### CL-MX Cat 6<sub>A</sub> F/FTP

#### **Specifications**

- 100 Ohms, 500 MHz, AWG23, 4 pairs and 2x4 pairs with patented single-foil metallic crossfiller design
- Superior EMC performances: grade 1 Transfer Impedance
- · Quick and simple twin removal actions for the sheath and the shield
- NIVP = 82 %
- Fire retardant properties for LSFRZH version according to IEC 60332-3C, NF C 32070 2.1, NF C 32070 2.2
- Compatible with PoE (Power over Ethernet) and PoEP (Power over Ethernet Plus) which allow to supply equipments (IP phone, camera, WiFi hotspot...) until 13 W or 25 W.

#### **Standards**

 Compliant to EN 50173-1, ISO/IEC 11801: 2011 Ed2.2, IEC 61156-5 Ed2 and EN 50288-10-1 standards.

Frequency	NEXT	
500 MHz	54.8 dB	

### Use

 Network cabling systems for category 6<sub>A</sub> voice & data applications. High data rates transmission: 10 Gigabit Ethernet, Gigabit Ethernet, 10/100 BaseT.

Туре	Weight	Diameter	Sheath	Cond/Length	Ref. No
4 pair cable	54 kg/km	7.3 mm	LSZH	500 m	VDICD68X218

### **Tools**

#### Cable stripper

- Allow to strip the cable sheath
- Adapted to all Actassi cables (CL-C, CL-MNC and CL-MX) to fit all cable diameters and sheath thicknesses
- Recommended tool for fast preparation and installation of Actassi CL-MX cables.

Туре	Ref. No	
Cable stripper	VDIR580021	



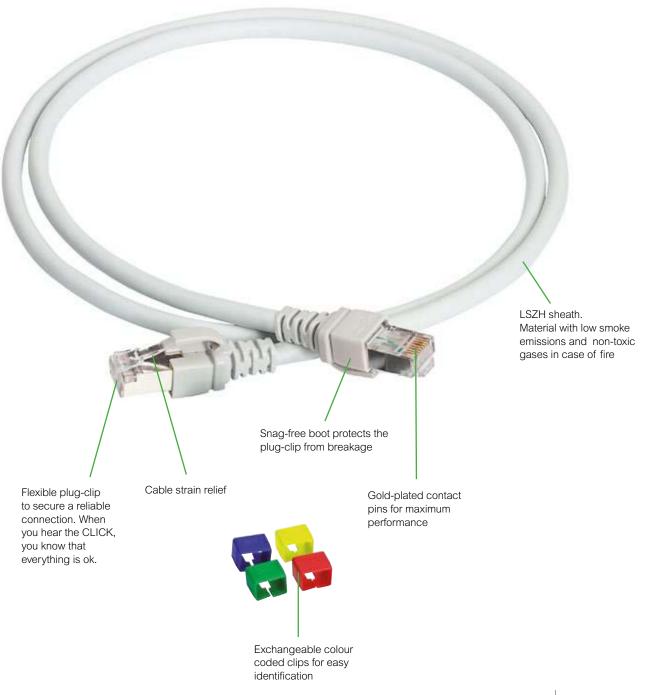




### Actassi copper patch cords

Actassi copper patch cords ensure a reliable transmission in data networks. They are available in several lengths delivering, Cat  $6_A$  performance level, covering both shielded and unshielded needs.

All patch cords are compliant with ISO/IEC 11801: 2011 Ed2.2. They are all Delta certified and also compliant to EN 50173ed.3, EIA/TIA 568 - C.2, IEC 61935-2. Actassi copper patchcords provide safe plug & play with a high quality thanks to the performances, the LSZH sheath and the warranties.



# Actassi Copper solution

# CL-MNC Copper patch cords Range

#### **Application**

• Ensures and gives transmission of data networks.

#### Performances

- High performance: Cat  $6_A$  for copper systems, standard and system warranty
- Compliant with: ISO/IEC 11801: 2011 Ed 2.2
- Full latest standards Delta certified EN 50173 Ed.3, EIA/TIA 568 C.2, IEC 61935-2.

### **Specifications**

- Low Smoke Zero Halogen (LSZH), 4 pairs, 100 Ohms, pre-wired and tested in factory, with light grey colour design (RAL 7035)
- · Connectors with grey overmoulding
- Snag-free connection to protect the plug-clip from breakage
- · Network identification thanks to coloured clips
- · Covers all needs for shielded and unshielded versions
- · Individual packaging.

### Patch cord U/UTP category 6<sub>A</sub>

### Specifications

• 550 MHz, outer sheath LSZH.

Туре	Colour of sheath	Length (m)	Ref. No
4 pairs	Grey	1	VDIP181X46010
		2	VDIP181X46020
		3	VDIP181X46030
		5	VDIP181X46050



### **Specifications**

• 550 MHz, outer sheath LSZH.

Туре	Colour of sheath	Length (m)	Ref. No
4 pairs	Grey	1	VDIP185X46010
		2	VDIP185X46020
		3	VDIP185X46030
		5	VDIP185X46050

### Coloured clips

Description	Packaging	Colour	Ref. No
Coloured clips	10	Blue	VDIP1811
		Yellow	VDIP1812
		Green	VDIP1813
		Red	VDIP1814







### Panel range with S-One DPM

### Actassi data panels

The data panels contain a front configuration for 24 RJ45 connectors. All panels have the smart Quick Fix function. They are available with shutters, label holders and a rear cable organiser. We try to make your life as easy as possible.





### Sliding helps installation

Maintenance and extensions are smoothly performed with the help of the Quick Fix sliding function.

### Actassi S-One

The connectors are a one-piece design for very fast and reliable wiring. Actassi S-One exceeds component hardware certification for standards like ISO/IEC 11801: 2011 Ed2.2 for Cat 6A, ensuring optimised network performance.



### Cable management

Apart from the systems with colour codes, labels and numbers, the technical setup at the rear of the panel is designed to enhance order. Cables of various diameters are easily mounted and kept in place in specified slots.



### Rear position Automatic numbers

Keeping track of each RJ45 could sometimes be very hard. Actassi is changing all of that! The cable numbers at the rear correspond to those at the front, simplifying installation and maintenance from both sides of the rack.



# earthing

An automatic earthing for FTP/STP versions is integrated in the panel.



### Clear front marking

Each panel plate has an openable label holder. Print your own labels or use the included versions with pre-printed port numbers. Each shutter can also be colour coded for quick identification in both open and closed positions.

### Actassi flat high-density panels

The new Actassi 19" flat data panel with connectors placed at an angle gives a new dimension to high density – the panels can be mounted directly on top of each other, with no need of intermediate guiding panels. They are available empty without connectors.



Quick Fix function
The panels are equipped
with a Quick Fix function
for a fast installation.



The flat data panel contain a configuration for 24 RJ45 connectors with a clear marking at both front and rear. The panels are easy to install thanks to the front access and the Quick Fix function. Use the vertical side rings for vertical management of the patch cords. Other features are the removable cable manager at the rear, the panel identification label and the hinged central label holder.







# Vertical side rings

Vertical side rings and connectors at an angle gives a true high density installation. The overhead patching frame saves space in the enclosure below.



# Connectors at an angle

Connectors placed at an angle combined with front access simplifies installation work.



# Clear front marking

Large identification labels for easy readability from ground level.



# Cable management

The cable manager can be folded or removed. Hooks for cable ties for extra safety.

# Actassi telecom panel and accessories

The smart and high capacity 19" telecom patch panel provides up to 50 connections. Very easy fixation of the panel thanks to the Quick Fix function with guiding fingers and pre-mounted screws. The Actassi system also includes a range of smart accessories for improved cable management. The innovative patchcords guiding panel is equipped with four openable rings, managing up to 48 cords.

### Exceptional robustness

The sliding function does not deteriorate the stability. As a proof you can use the punch down tool for LSA contacts with the panel in a sliding-out position. You don't need to remove it from the rack first!





Punch down tool

This is the punch down tool for LSA contacts, to be used for telecom cable connections.



Cable identification

No need trying to figure out which cable goes where. The cable identification is very clear on the clever fixing guides.



Clear marking

The telecom panel comes with pre-printed labels and openable label holders.



Safe and easy earthing

The panel has two earthing connection points for both shielded cables and for the rack, easily accessible at the rear.



Side rings for rack 800x800

Rings for vertical management of up to 48 patch cords, attached to each side of the guiding panel (or any panel with Quick Fix). Available for 1U and 2U.



Guiding panels for patch cords

The 1U panel manages 24 cords, and 2U panel 48 cords. Easily opened but still safe, since a clever device prevents cords from falling out. Also possible to pull out only one cord if needed.



# Brush and blank panel

Brush guiding panel. Blank panel instead of an empty gap in the rack.

# Actassi Copper solution

# 19-C Copper panels S-One DPM range

# Empty sliding panel for S-One DPM connectors 1U 24 ports

- Empty sliding 19» copper panel (without connectors)
- 1U height
- 24 RJ45 ports
- 1 Quick Fix function on both sides to allow a simple, quick fixing position and sliding feature
- Panels equipped with 24 shutters in light grey, 4 label holders, and one cable manager at the rear
- Metal sheet: thickness 1.2 mm. Dark grey RAL 7016
- Plastic parts in PA66 GF20 or PA6
- · Simple clicking connectors for mounting
- · Automatic earthing with the pre-equipped bus bar.

Evolution version: pre-equipped with 24 light grey shutters, 4 label holders, 1 rear cable organiser

Description	Ref. No
Empty panel for DPM connectors 1U FTP/STP 24 ports	VDIG111241F



Basic version: without label holders and cable organiser

Description	Ref. No
Empty panel for DPM connectors 1U FTP/STP 24 ports	VDIG011241F

### Telecom panel 50 ports

- · Telecom panel 50 ports in 2 rows
- 1U height
- The telecom cable wires are terminated in LSA punch down blocks on the PCB according to a clear numbering
- 1 Quick Fix function on both sides to allow a simple, quick fixing position and sliding feature
- With label holders
- Cable organiser at the rear with number identification.

Description	Ref. No
Telecom panel 50 ports	VDIG141501





# Actassi Copper solution

### HD panel, cable management and accessories S-One DPM

# Empty flat panel for S-One DPM connectors in angle, 1U 24 ports

- 1U height
- 24 RJ45 ports
- Allows high-density copper ports installation. Connectors are positioned in angle
  to guide the patch-cords to the vertical sides of the enclosure. The installation of
  copper ports is maximised as there is no need to consume rack units to mount
  horizontal guiding panels
- Recommended mounting with vertical side ring for vertical management of the patch-cords (reference VDIM189412)
- 1 Quick Fix function on both sides to allow a simple, quick fixing position
- Equipped with a label holder and a cable manager at the rear
- · The cable manager can rotate and be removed to ease the accessibility
- Metal sheet: thickness 1.2 mm. Dark grey RAL 7016
- · Plastic parts in PA66 GF20 and PC
- Simple clicking the connectors for mounting
- · Automatic earthing with pre-equipped bus bar.

Empty flat 19" copper panel for DPM connectors in angle (delivered without connectors)





### Patch cord guiding panels

- Patch cord guiding panel
- 1U, 2U
- 1 Quick Fix function on both sides to allow a simple, quick fixing position
- 4 openable rings
- Patch cord holder integrated inside the ring for opened position.

Description	Ref. No
Patch cord guiding panel 1U with 4 openable rings	VDIG188141
Patch cord guiding panel 2U with 4 openable rings	VDIG188142



### Brush guiding panel

- Patch cord guiding panel
- 1U
- 1 Quick Fix function on both sides to allow a simple, quick fixing position.

Description	Ref. No
Patch cord brush guiding panel 1U	VDIG188201



# Actassi Copper solution

### Cable management and accessories S-One DPM

### Side rings for vertical management

- · Rings for vertical management of patch cords, in horizontal and vertical position
- Openable
- For racks 800 x 800 mm and 600 x 600 mm
- Can be fixed on each side of any Quick Fix system panel or guiding panel
- Large capacity up to 48 cords.

Description	Ref. No
Horizontal ring for vertical management of patch cords, 1U, for rack 800x800 mm	VDIM189112
Vertical ring for vertical management of patch cords, 2U, for rack 800x800 mm	VDIM189412

### Cable organiser

Description	Ref. No	
Cable organiser for fixation of up to 24 cables inside the panel	VDIM11U001	

### Label holders for data panels

Ref. No	
VDIM11U002	

### Rack earthing kit

Description	Ref. No
Rack earthing kit, pack of 10 pcs	VDIM48E010

### RJ45 shutters

Description	Ref. No
Shutters, blue, pack of 24 pcs	VDIM11U241
Shutters, yellow, pack of 24 pcs	VDIM11U242
Shutters, green, pack of 24 pcs	VDIM11U243
Shutters, red, pack of 24 pcs	VDIM11U244
Shutters, grey, pack of 24 pcs	VDIM11U246

### Metal blank panel

 1 Quick Fix function on both sides to allow a simple, quick fixing position.

Description	Ref. No
Blank panel 1U	VDIG188021















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