

UMJ-SL MODULE



UNSHIELDED.
POWERFUL.
SHORT.

The new unshielded module makes cabling easy and eliminates grounding problems.



SHIELDED OR UNSHIELDED?

The answer to this question depends on the project at hand. Depending on grounding/bonding, low-frequency magnetic field, available space and budget, unshielded cables can be an extremely interesting and cost-effective alternative.

UMJ-Module K

- Universal, globally common keystone format for 19.3 x 14.7 mm cut-outs
- Class E_A 500 RJ45 core manufactured automatically for consistently high standards of quality (transmission performance)
- Total length 41.3 mm

CAT.6

SHIELDED

CAT.6_A

AMJ-Module K

- Suitable for 10 Gigabit Ethernet
- 25-year system warranty
- Suitable for 4PPoE
- Universal, globally common keystone format
- No specific tools necessary

AMJ-S Module

- Reliable transmission even under strong external electrical interference
- Robustness exceeds the standards
- 360° shielding connection adapts to the cable diameter automatically
- Universal module carrier accepts third-party faceplates from a wide range of manufacturers

UMJ-SL Module
The robust module with
GHMT type approval certification



The new unshielded
RJ45 module:
powerful, short and
easy to connect

UMJ-SL Module

- Assembly in less than 90 seconds
- One-piece housing
- No grounding necessary
- Total length of just 32 mm
- The cable is thinner and more flexible than shielded cables

UNSHIELDED
CAT.7

AMJ-SL Module

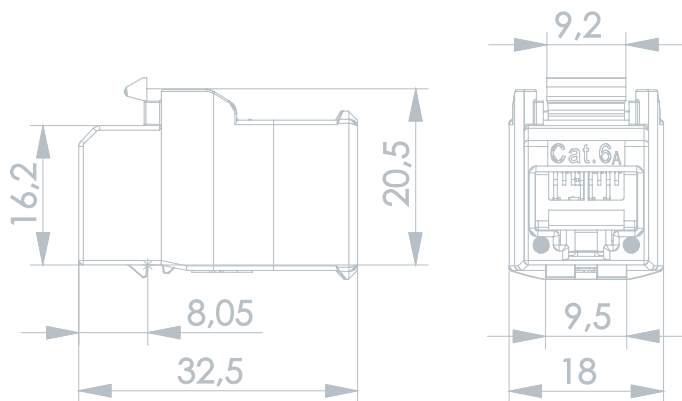
- Its total length of just 32 mm makes it ideal even for installation in tight spaces
- Robust die-cast zinc housing with finished surface
- Secure latching with a metal barbed snap-in latch
- The extremely short length allows for maintaining the proper cable bend radius

Telegärtner provides all IT cabling media, from fiber optic and coaxial to shielded and unshielded twisted-pair solutions. Like the shielded AMJ-SL, the unshielded UMJ-SL boasts an impressively compact design, ease of installation and performance. Unlike traditional shielded systems, however, the total cost of the cabling is significantly lower, yet it naturally retains the same high level of quality and reliability.

THE UMJ-SL IS EFFICIENT.

The UMJ-SL module is exceptionally quick and easy to install, takes up little space and delivers even more benefits besides the typically high transmission headroom Telegärtner is known for:

- Assembly in less than 90 seconds
- Tried-and-tested wire manager for exceptionally quick connecting of the wires
- No need to untwist the wire pairs
- No special tools needed for assembly
- One-piece housing, so no housing components can get lost on-site
- Total length of just 32 mm, making it over 20% shorter than the UMJ Module K
- Ideal even when space is extremely limited
- Fits all Telegärtner AMJ and UMJ patch panels and outlets
- Exceeds the specifications of Category 6_A for 10 Gigabit Ethernet (confirmed by independent test laboratories such as GHMT)
- Suitable for Four-Pair-Power-over-Ethernet (4PPoE) according to IEEE 802.3bt
- Built-in protection against overbending the contacts
- EMI compliant according to EN 50173-1
- No grounding of the cabling necessary
- Extremely low total cost of ownership (TCO) as the existing electrical cabling remains unchanged as the project scenarios on the following pages show



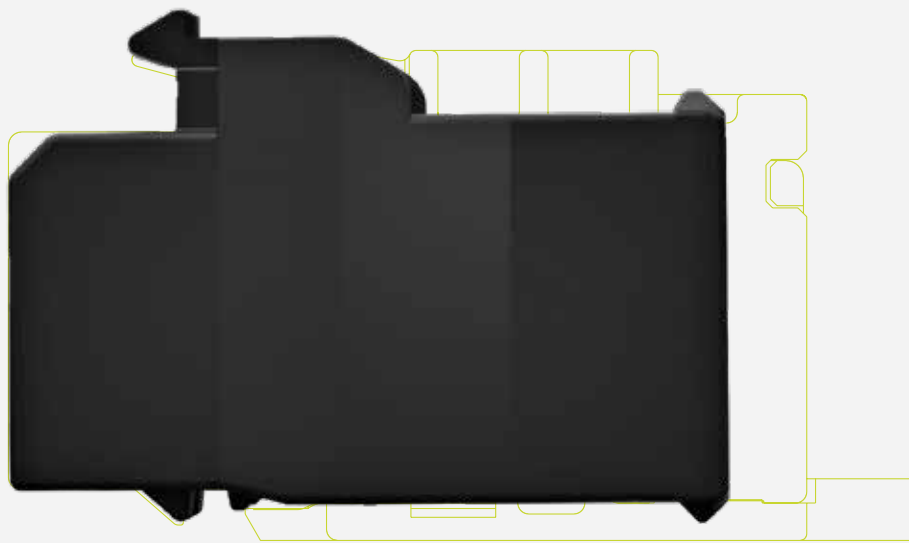
The UMJ-SL eliminates bonding problems – thoroughly and economically.

Shielded cabling needs grounding and bonding that has to go far beyond the minimum requirements specified by the electrical standards. Especially in older buildings where the electrical installation complies with the electrical standards yet grounding and bonding do not meet the exceptionally strict requirements for shielded cabling, high-quality unshielded cabling is the perfect solution. UTP cabling requires neither grounding nor bonding as it already meets the EMI requirements by design. The standard-compliant electrical installation can then be left untouched, which lowers the total cost of the project dramatically.

SHORT AND TO THE POINT.

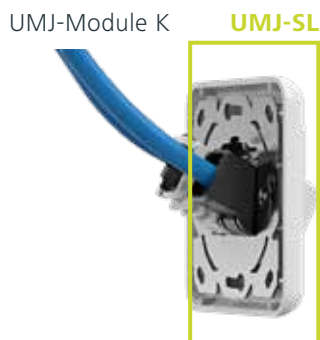
At just 32 millimetres in length, the UMJ-SL is over 20% shorter than the tried-and-tested UMJ-Module K, which means that it leaves enough room for the minimum cable bending radius when space is tight, and even protects against crushing and kinking in extremely cramped installations.

At the same time, the UMJ-SL boasts even better transmission values, exceeds the specifications of Category 6A for 10 Gigabit Ethernet by far and is compatible with Four pair Power over Ethernet (4PPoE) according to IEEE 802.3bt.

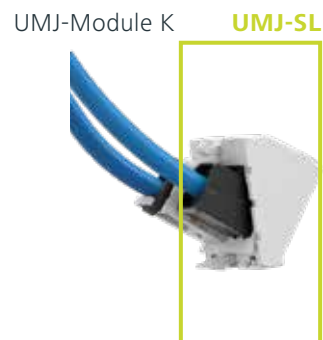


L 41,3 mm x B 17,9 mm x H 23,1 mm (UMJ-Module K)

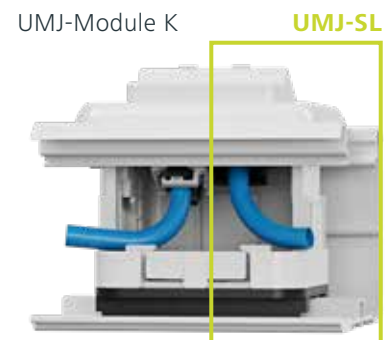
L 32,5 mm x B 18,0 mm x H 20,5 mm (UMJ-SL Module)



The extremely short module allows for a larger cable bending radius and, in turn, optimised transmission.



The UMJ-SL fits into a huge variety of globally common outlets and faceplates like the popular 45 mm snap-in type.



When used in a universal equipment mounting set, larger cable bending radii are permitted and there is no performance degradation.

WHEN DOES UNSHIELDED CABLING MAKE SENSE?

It depends on whether there are problems with low-frequency magnetic fields, extensive grounding and bonding is needed or space is limited and cost pressure is high.

Then our UMJ-SL module is the ideal solution.

Fact:

The vast majority of IT networks around the world are unshielded. Even DIN EN 50173-1 and ISO/IEC 11801-1 provide for unshielded components. Depending on the project and its constraints, unshielded cables that meet the relevant standards offer considerable advantages compared to shielded ones.



Example 1:

An older building gets an FTTH connection

High-performance copper cabling is needed to deliver the high data rates right to the end-users devices, simply because WiFi is not always a good choice and many users prefer reliable, high-performance cabling.

Unfortunately, it isn't always easy to retrofit a high-performance cable: there is little space for thick, shielded cables and the grounding and bonding required by shielded cabling is complex and expensive.

Unshielded cabling does not need to be grounded and the cables are thinner and more flexible than shielded ones, making them much easier and less obtrusive to install. The short UMJ-SL module takes up little space and is quick and easy to install in tight spaces – without the need for special tools. This future-proof solution reliably transmits both 10 Gigabit Ethernet and Four pair Power over Ethernet. Guaranteed.

01



**Example 2:
IT network in an older building**

A company or authority moves into an older building. The electrical installation complies with the electrical standards, yet the grounding and bonding does not meet the exceptionally strict requirements that apply to shielded IT cabling. Modifying the grounding and bonding often involves a complete rework of the electrical installation, which costs a considerable amount of money.

Unshielded cabling has no need for grounding and bonding as it meets the EMI requirements by design. The existing standard-compliant electrical installation can remain in place as is, which lowers the total cost of the project considerably and increases its overall cost-effectiveness. With data rates of 10 Gbit/s and a 25-year system warranty, cabling with the UMJ-SL is absolutely future-proof and a safe investment.

02



**Example 3:
Low-frequency magnetic fields near railways**

A building near railway lines is to be fitted with a high-performance IT network. The problem: cable shields are designed for high-frequency electromagnetic fields, yet they are almost completely ineffective against low-frequency magnetic fields like the one generated by the 16 2/3 Hz current used for railway electrifications systems. As a result, passing trains cause disruption.

The solution: unshielded cables are protected against low-frequency magnetic fields by design, as the induced voltage is cancelled out by the tight, constant pair twist. The problem could also be solved with a fiber optic network, but this is a significantly more expensive option.

03

RELIABILITY — INDEPENDENTLY VERIFIED

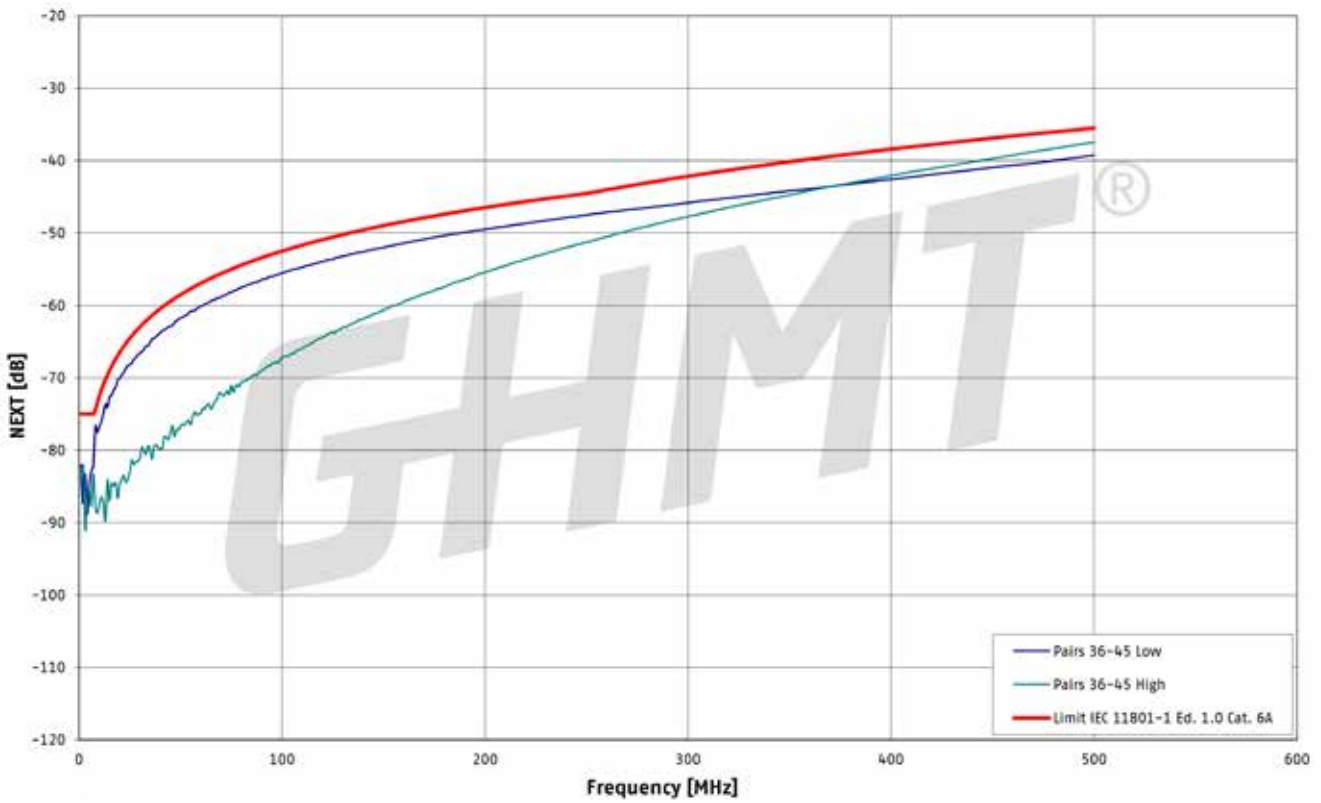
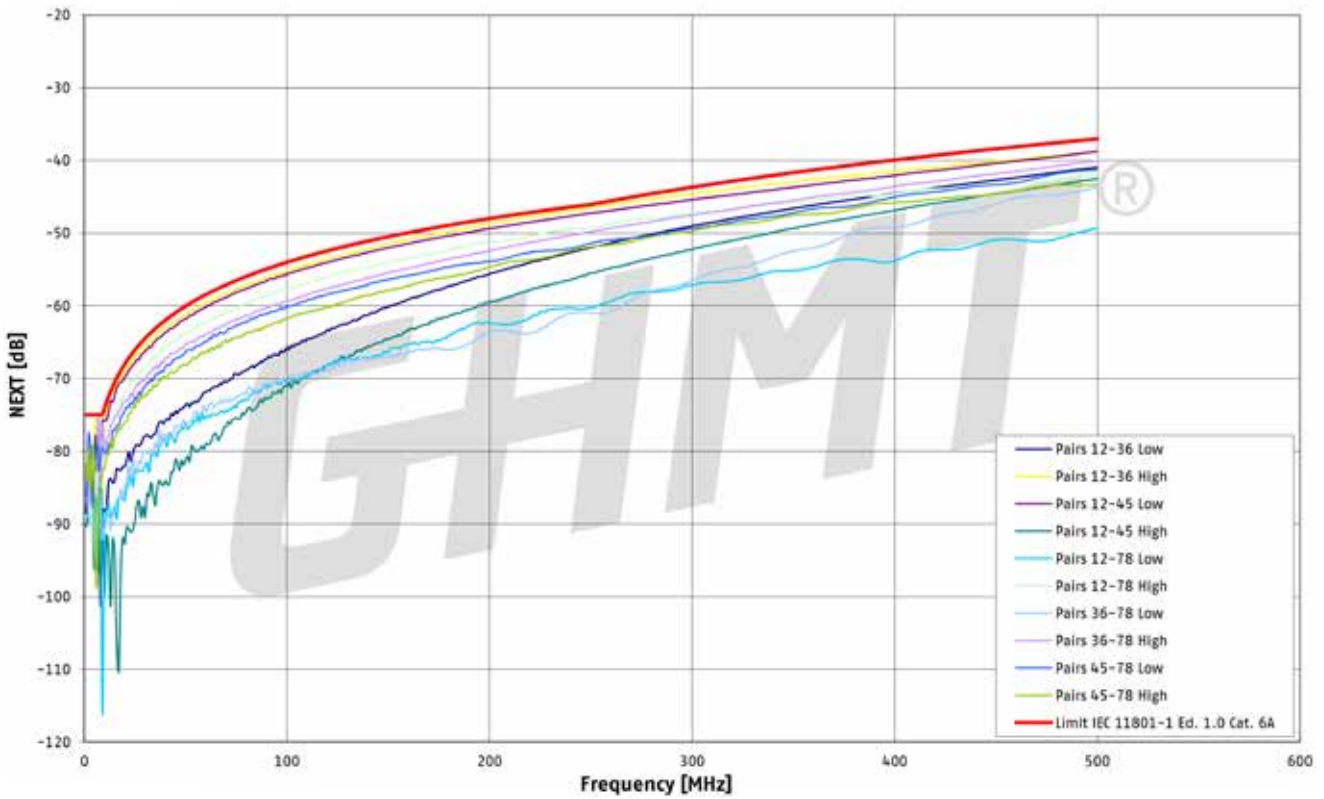


The UMJ-SL offers enormous headroom for the reliable transmission of high data rates.

Telegärtner cabling components exceed the specifications of national and international standards. Regular testing in the Telegärtner RF test lab make sure that users get the consistent high quality they expect from Telegärtner components.

Type approvals by independent test labs like GHMT regularly confirm that Telegärtner product solutions are 100 percent compliant to the standards, and the graphs of the test results document the enormous headroom Telegärtner components offer for the reliable transmission of high data rates.

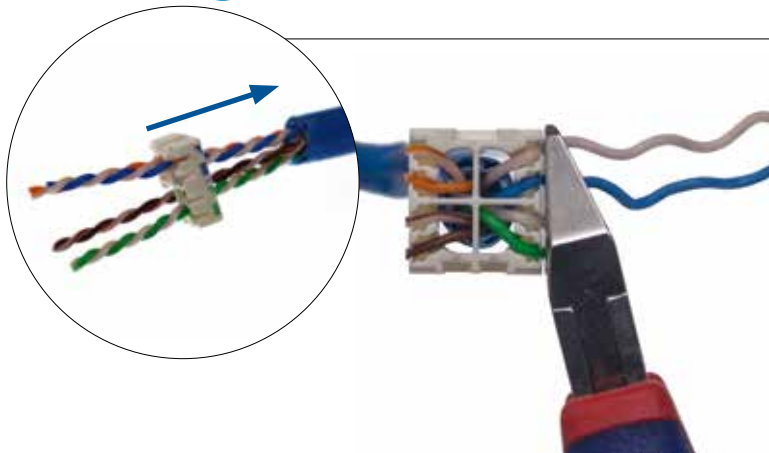
NEXT Type Approval* Category 6_A



*GHMT AG

FAST AND EASY

01



Integrated wire management

- Remove the cable jacket, pre-sort the pairs and insert them into the wire manager
- Cut off excess length

Quicker assembly:

wire pairs do not need to be untwisted which speeds up correct preparation prior to assembling just two components.

02



IDC connections

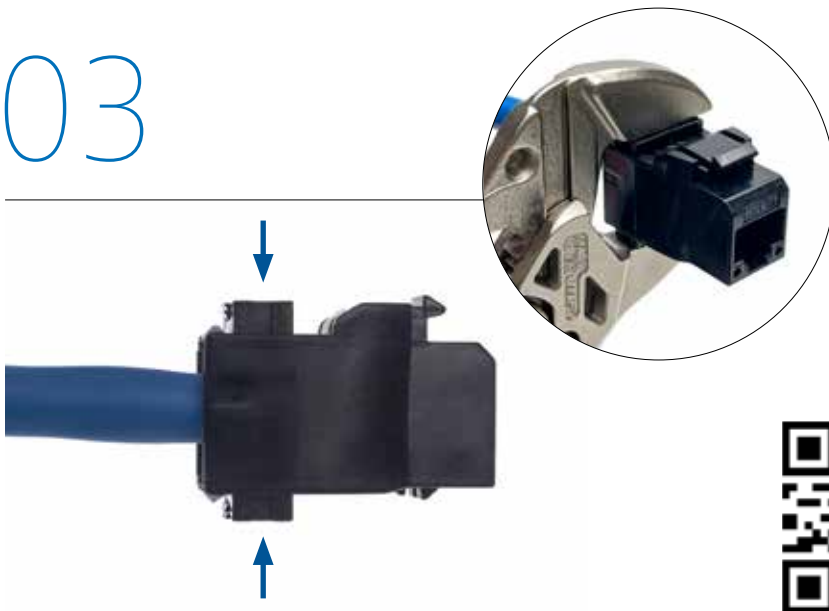
- Insert coded wire manager into housing

Failsafe:

The mechanically coded wire manager can only be inserted in one position.

Reliable without the need for special tools: UMJ-SL assembly

03



You can watch
the corresponding
assembly video here.


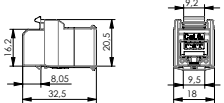

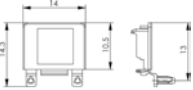

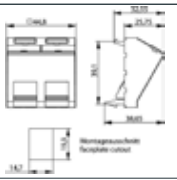

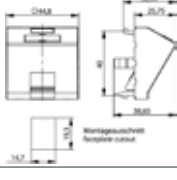




Close without special tools

- Press both clamps together with your hands
- Then press clamps together with a pair of pliers

Quick housing assembly:

The clamps can be pressed together easily and ergonomically ensure automatic and safe contacting of all eight wires as well as safe cable strain relief in a single action.

Order Information

Modules	Order no.	Description	PU*	Colour
Order no. old Order no. new	100034491	UMJ-SL Module Cat.6 _A T568A	1	black
	100042431		24	black
	100034493	UMJ-SL Module Cat.6 _A T568B	1	black
	100042316		24	black
	B0001A0016W 100027359	Protection flap	100	black
	B0001B0016W 100027360	Protection flap	100	orange
	B0001C0016W 100027361	Protection flap	100	green
	B0001D0016W 100027362	Protection flap	100	blue
	B0001E0016W 100027363	Protection flap	100	yellow
Faceplates	Order no.	Description	PU*	Colour
	H02010C0063 100021428	Faceplate 45x45, double gang, without module/coupler, mating direction 45°	10	white
	H02010C0065 100021430	Faceplate 22,5x45 angled, single gang without module/coupler, mating direction 45°	20	white
	H02010C0064 100021429	Faceplate 45x45 angled, single gang without module/coupler, mating direction 45°	10	white
	H02000A0071 100021371	Single gang surface mounting box 46x64, 1x AP compact, incl. shutter and marking window, without modules/adaptors	10	alpine white
	H02000A0072 100021372	Double gang surface mounting box 68x64, 2x AP compact, incl. shutter and marking window, without modules/adaptors	5	alpine white
	H02010A0068 100021411	Faceplate 25x50, single gang, w/o modules, 180°, with shutter and label field	150	white
	H02010A0069 100021412	Faceplate 25x50, single gang, w/o modules, 45°, with shutter and label field	125	white
				



19" Frontplate without modules / couplers

Order no. old
Order no. new

Order no.

Description

PU*

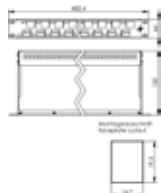
Colour

H02025A0238
100021505

19" Frontplate 1HU,
angled for 24 AMJ Module

1

black



19" Frontplate 1,5 HU
with cable strain relief

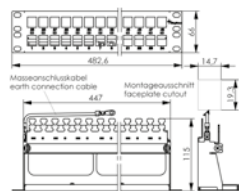
1

H02025A0171
100021494

light grey
RAL 7035

H02025A0241
100021507

black

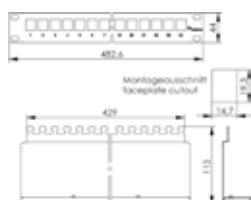


H02025A0167
100021492

19" Frontplate 1 HU
with cable strain relief

1

light grey
RAL 7035



H02025A0234
100021502

19" Frontplate Flex 1 HU
incl. 24x snap-in-bezels
for 24 AMJ-S / AMJ-Modules /
Couplers,
incl. grounding kit 0,3 m

1

front
plate:
light grey
RAL 7035
/ face
plate:
alpine
white



19" Frontplate 1 HU
without cable strain relief

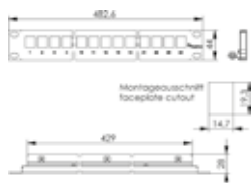
1

H02025A0197
100021496

light grey
RAL 7035

H02025A0221
100021498

black



Cover frame

Order no.

Description

PU*

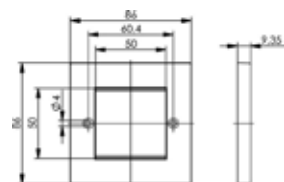
Colour

B00005A0011
100000513

Cover frame 86 x 86
double gang

80

white

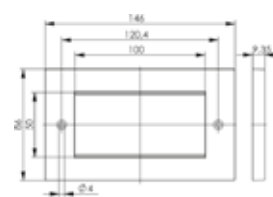
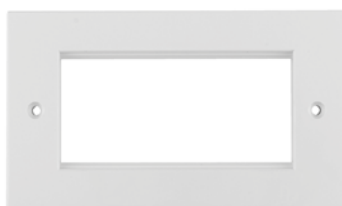


B00005A0012
100000514

Cover frame 86 x 146
quad gang


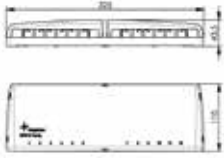

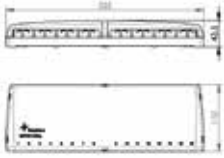

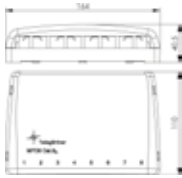

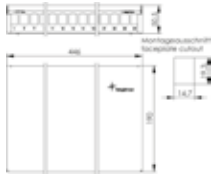



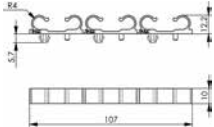

50

white



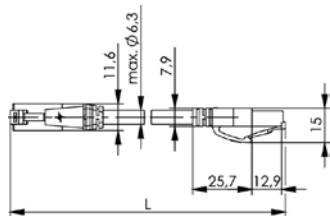
*PU=Packaging Unit

Order Information

Mini Distributor		Order no.	Description	PU*	Colour
Order no. old Order no. new		H02000A0106 100021394	MPD12 AMJ/UMJ TH35/AP	1	alpine white
					
		H02000A0107 100021395	MPD16 AMJ/UMJ TH35/AP	1	alpine white
					
		H02000A0103 100021392	Mini Distributor MPD8 AMJ/UMJ TH35/AP without modules	1	alpine white
					
		H02025A0260 100021514	MPD24 AMJ/UMJ incl. cable strain relief, 24 Ports	1	pure white RAL 9010
					
UFP8 Cat.6 _A unshielded		Order no.	Description	PU*	Colour
 Fig. may deviate		J00026A3000 100023051	UFP8 T568A Cat.6 _A	1	black
		J00026A3001 100023052	UFP8 T568B Cat.6 _A	1	black
		J00026A3002 100023053	UFP8 T568A Cat.6 _A	1	black
		J00026A3003 100023054	UFP8 T568B Cat.6 _A	1	black
		J00026A3110 100023055	UFP8 T568A Cat.6 _A	10	black
		J00026A3111 100023056	UFP8 T568B Cat.6 _A	10	black
		J00026A3112 100023057	UFP8 T568A Cat.6 _A	10	black
		J00026A3113 100023058	UFP8 T568B Cat.6 _A	10	black
		Accessories		Order no.	Description
		H01011A0048 100021336	Cable guiding set for 24 cables; suitable for frontplate H02025A0171, H02025A0260	4	black
		N00000B0020 100025800	Parallel pressing tool for AMJ/UMJ/STX modules; MFP8	1	

Patch Cord U/UTP Cat.6_A LSZH

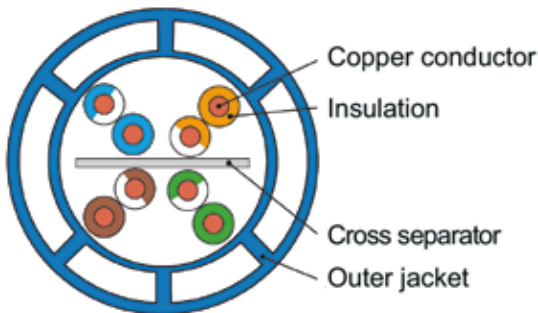
Order no. old
Order no. new



Order no.	Description	PU*	Length	Colour
L00000A0340 100008076	Patch Cord U/UTP Cat.6 _A LSZH	120	0,5 m	blue
L00000A0341 100008077	Patch Cord U/UTP Cat.6 _A LSZH	70	1,0 m	blue
L00001A0264 100008333	Patch Cord U/UTP Cat.6 _A LSZH	45	2,0 m	blue
L00002A0259 100008528	Patch Cord U/UTP Cat.6 _A LSZH	30	3,0 m	blue
L00003A0230 100008733	Patch Cord U/UTP Cat.6 _A LSZH	20	5,0 m	blue
L00004A0206 100008907	Patch Cord U/UTP Cat.6 _A LSZH	15	7,5 m	blue
L00005A0153 100009045	Patch Cord U/UTP Cat.6 _A LSZH	20	10,0 m	blue
L00006A0358 100009294	Patch Cord U/UTP Cat.6 _A LSZH	15	15,0 m	blue
L00006A0359 100009295	Patch Cord U/UTP Cat.6 _A LSZH	8	20,0 m	blue
L00006A0360 100009296	Patch Cord U/UTP Cat.6 _A LSZH	6	25,0 m	blue

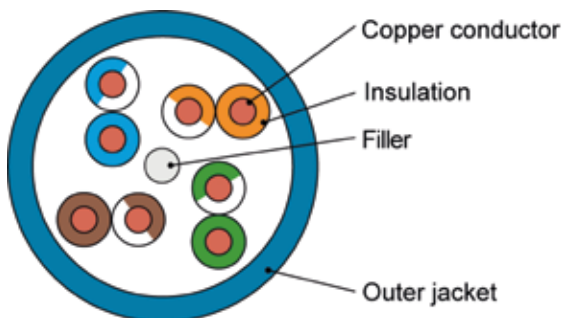
Installation cable UMJ 500 U/UTP 4x2xAWG23/1 LSZH, Cat.6_A

Order no.	Description	PU*	Length	Colour
L02002A0176 100013123	Installation cable UMJ 500 U/UTP 4x2xAWG23/1 LSZH, Cat.6 _A	305,0 m		blue



Installation cable UMJ 300 U/UTP 4x2xAWG23/1 LSZH, Cat.6

Order no.	Description	PU*	Length	Colour
L02002A0262 100013181	Installation cable UMJ 300 U/UTP 4x2xAWG23/1 LSZH, Cat.6	500,0 m		blue



*PU=Packaging Unit



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