

P | Cabling



C6_A modul and C6_A modul K

The connection system for a wide variety of applications –
of course with Cat.6_A



Members of METZ CONNECT



Intelligent system solution for structured cabling

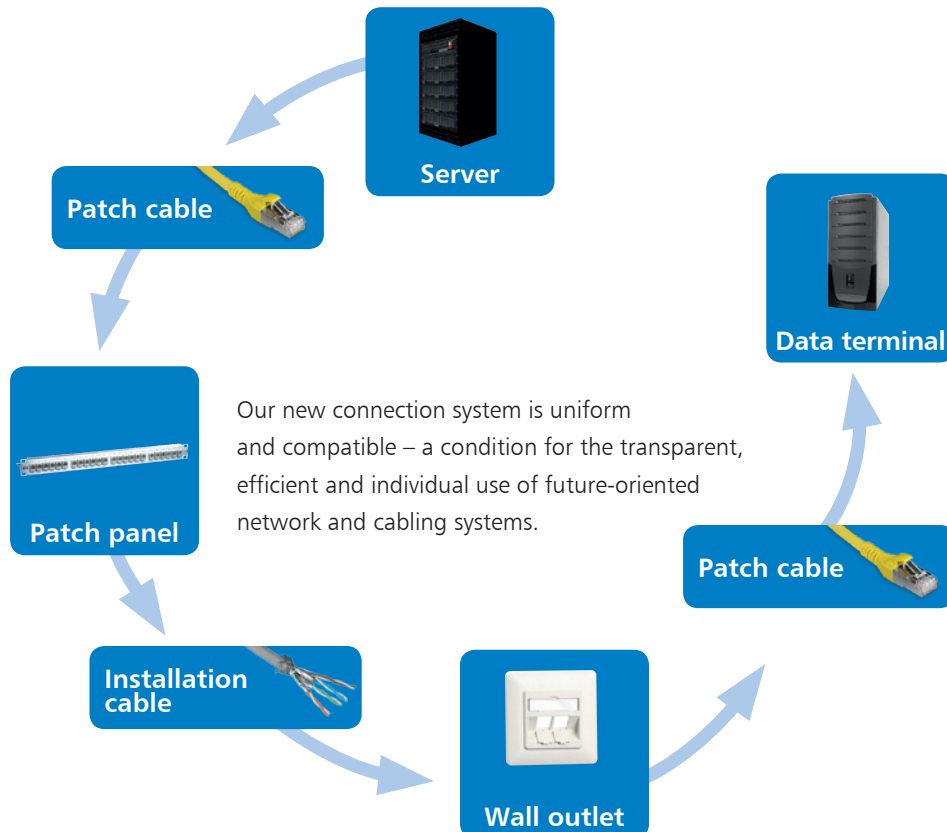
Nowadays the need for high data transfer rates is enormous. This not only applies to public buildings and office complexes, but also to real estate and private property. Farsighted, intelligent building cabling for an extremely broad range of uses is just as important for the residents as a basic house and building services management system. It helps owners to secure investments for many years and to minimize installation and maintenance costs. National and international standards apply as a guideline for the planning and implementation of cabling systems, however they only represent a basis. Uniform, internationally standardized, high-performance network solutions – like our new C6_Amodul and C6_Amodul K connection systems with Cat.6_A – are important for sustainable, structured building cabling. The modules are convincing with their extremely high degree of system compatibility. The new developments enable varied uses in a broad range of different applications.

In addition to the new C6_Amodul, we also offer additional solutions in the P|Cabling product line for structured building and industrial cabling and for data centers. These are highly specialized, internationally standardized, high-performance connection components and systems in copper and fiber optics technology.

All these products offer a high level of installation friendliness, top quality and maximum system compatibility across all relevant performance classes.



Highest compatibility for efficient use



Overview of C6_Amodul and C6_Amodul K features

This new, flexible, modular heart of the system succeeds in guaranteeing a general cabling basis with which it is irrelevant which communication application is processed with it.

- Cat.6_A component test in accordance with ISO/IEC 11801 Ed.2.2:2011-06, TIA/EIA-568-C.2 (2009-08) and IEC 60603-7-51 Ed.1 (12/2008), GHMT-certified
- Compliance with Class E_A according to ISO/IEC 11801 Ed.2.2 (FPDAM)
- Component tested up to 600 MHz, link tested up to 800 MHz
- 2 designs: Modul and Keystone
- 3 versions of cable feeding: 90°, 180° and 270°
- Connection without special tools, short assembly and connection time
- Connection of patch and installation cable is possible in the sizes AWG 26/7–22/7 and AWG 24/1–22/1
- Suitable for PoE, PoE plus and UPoE
- Solid, reusable module housing of diecast zinc
- Intelligent cable management in the stuffer caps – also suitable for heavily twisted wires – and easy installation in various applications
- Strain relief with locking clip directly on stuffer cap
- 360° shield connection
- A dust protection flap is available as an option

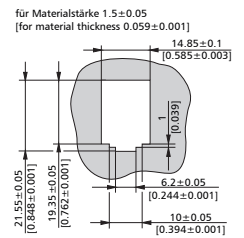
C6_Amodul versions (BTR module cut-out)

C6_Amodul 90°

C6_Amodul 180°

C6_Amodul 270°

cut-out



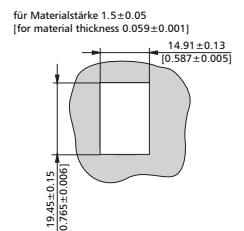
C6_Amodul K versions (Keystone module cut-out)

C6_Amodul K 90°

C6_Amodul K 180°

C6_Amodul K 270°

cut-out



For a broad range of uses and universal – system solutions from a single supplier

The challenges for a future-oriented connection system that must be suitable for universal, flexible use with building cabling are enormously diverse. The new C6_Amodul and C6_Amodul K connection systems meet these complex requirements: The modules enable versatile use in various applications, including the applications of the E-DAT modul system which already exist, as well as the keystone applications on the market. Thanks to the three versions of cable feeding, the modules can also be optimally used in cramped spaces.

Additional advantages are the easy, inexpensive assembly without special tools and the direct use with face plates of leading switch line manufacturers. All network components are uniform – from the server to the patch cable, patch panel and wall outlet to the data terminal. We offer compatibility from a single supplier. The advantages of our system solutions are increased safety and considerably simplified assembly and installation.

Applications for C6_Amodul (Design: Modul)

**Surface-mounted outlet
1-, 2- and 3-port**



**Flush-mounted outlet,
1-, 2- and 3-port**



**Raceway outlet (UPk),
1-, 2- and 3-port**



**Raceway outlet (UP0),
1-, 2- and 3-port**



**Housing REGplus
for TH35 rail**



**Surface-mounted
IP20/IP44 housing**



Underfloor GB2/GB3



**Surface-mounted housing
3, 4, 6, 8, 12 and 16 Port**



**Patch panel
24 Port 1HE**



Applications for C6_Amodul K (Design: Keystone)

Flush-mounted outlet K, 2-port



Raceway outlet K, 2-port



**Surface-mounted outlets and
and faceplates**



Module frame, 24 Port K 1HE



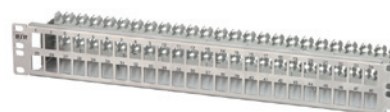
Cabinet bushing, IP67



Underfloor unit GBV2D



Modul frame 48 Port K 1,5HE

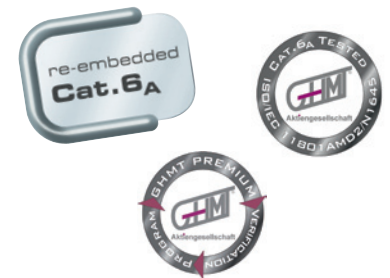


High performance

The modules feature high performance due to their compliance with the Cat.6_A component standard according to ISO/IEC 11801 Ed.2.2 (FPDAM) for demanding applications in the range up to a 500 MHz bandwidth and 10 Gbit Ethernet according to IEEE 802.3an. The C6_Amodul has been tested as a component up to 600 MHz and up to 800 MHz in the link. The high product quality is additionally reinforced with a solid diecast zinc housing.

Independent certification

The connection system complies with the international Cat.6_A standard and has been tested and certified by an independent accredited test laboratory according to ISO/IEC 11801 Ed.2.2:2011-06, TIA/EIA-568-C.2 (2009-08), IEC 60603-7-51 Ed.1 (12/2008) and DIN EN 50173-1:2011-09. Due to our participation in the continuous and independent GHMT Premium Verification Program (PVP) and the certification resulting thereof you know for sure that you always use a tested and high-quality product. The requirements for Class E_A are also complied with in the permanent and channel link according to the standard specified above.



Cat.6A, Cat.6_A?

There is some confusion on the market as to the designations and the specifications of the Cat.6_A standard, as two valid standards apply to it. The specifications of the TIA/EIA (American standard) are characterized by less strict values and do not distinguish between the cabling section and the component. Everything is referred to as a category (Cat.) here. On the other hand, the ISO/IEC (international standard) distinguishes between cabling sections (Class) and the component (Cat.), and the specifications are more demanding. In addition, the two standards differ in the spelling of Cat.6A (TIA/EIA) and Cat.6_A or Class E_A (ISO/IEC).

The performance of a Cat.6A channel link according to EIA/TIA is not comparable with the performance of a Class EA channel link according to ISO/IEC! If you want to make sure as a user that you obtain optimum cabling according to Class E_A, then you must use the components of the Cat.6_A specification according to ISO/IEC.

Suitability of the components in a comparison of the standards ISO/IEC and TIA/EIA

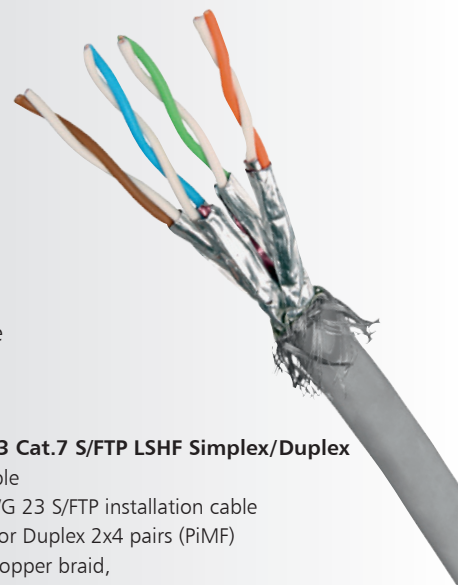
| | TIA/EIA Cat.6A Channel | TIA/EIA Cat.6A Permanent Link | TIA/EIA Cat.6A Component | ISO/IEC Class E _A Channel | ISO/IEC Class E _A Permanent Link | ISO/IEC Cat. 6 _A Component |
|--------------------------------------|------------------------|-------------------------------|--------------------------|--------------------------------------|---|---------------------------------------|
| TIA/EIA Cat.6A Component | ✓ | ✓ | ✓ | 2 Conn. short 4 Conn. critical | 2 Conn. short 3 Conn. No | ⊘ |
| ISO/IEC Cat.6 _A Component | ✓ | ✓ | ✓ | 2 and 4 Conn. ✓ | 2 and 3 Conn. ✓ | ✓ |

✓ = Compliance with specifications ⊘ = No compliance with specifications

Conclusion: Components which comply with the specifications of ISO/IEC Cat.6_A, like our C6_Amodul connection system, can be used worldwide, as the „stricter“ limits apply here.

No system without installation and patch cables

The performance of all components is required for the 10 Gbit high-speed data transfer. This includes not only the connection components, but also the installation and patch cables. Our product line includes suitable installation and patch cables to provide you with the entire, uniform solution from the server to the data terminal.



GC1500 pro22 Cat.7_A S/FTP 4P LSHF-FR (Simplex)

- 10 GBit installation cable
- Pair-shielded Cat.7_A AWG 22 S/FTP installation cable
- 4 pairs (PiMF)
- Overall shield: tinned copper braid, coupling attenuation ≥ 85 dB
- Applicable standards: EN 50173-1; ISO/IEC 11801; EN50288-4-1; IEC61156-5 und IEC61156-7
- Flame retardance: IEC 60332-1; IEC 60332-3-24; IEC 60754-2 and IEC 61034
- Standard length: 1000 m (3280 ft) on drum
- Cable sheath: LSHF-FR (LSOH-FR) – low smoke halogen-free, flame retardant

| Part Number | Description | EAN |
|----------------|---------------|---------------|
| 1308427A34132M | 1000m on drum | 4250184148449 |

GC1200 High Screen 22 Cat.7_A S/FTP LSHF-FR Simplex/Duplex

- 10 GBit installation cable
- Pair-shielded Cat.7_A AWG 22 S/FTP installation cable
- Simplex 4 pairs (PiMF) or Duplex 2x4 pairs (PiMF)
- Overall shield: tinned copper braid
- Pair Shield: plastic composite film, aluminum coated
- Tested according to the following standards: EN 50173, ISO/IEC 11801 and EIA/TIA 568A
- Standard length: Simplex = 1000 m / Duplex = 500 m on drum
- Cable sheath: LSHF-FR (LSOH-FR) – low smoke halogen-free, flame retardant

| Part Number | Description | EAN |
|----------------|-----------------------|---------------|
| 1308427A32132M | Simplex 1000m on drum | 4250184139140 |
| 1308427A32133M | Duplex 500m on drum | 4250184139133 |

GC1000 pro23 Cat.7 S/FTP 4P LSHF-FR (Simplex)

- 10 GBit installation cable
- Pair-shielded Cat.7 AWG 23 S/FTP installation cable
- 4 pairs (PiMF)
- Overall shield: tinned copper braid, coupling attenuation ≥ 85 dB
- Pair Shield: plastic composite film, aluminum coated
- Applicable standards: EN 50173-1; ISO/IEC 11801; EN50288-4-1; IEC61156-5 and IEC61156-7
- Flame retardance: IEC 60332-1; IEC 60332-3-24; IEC 60754-2 und IEC 61034
- Standard length: 1000 m (3280 ft) on drum
- Cable sheath: LSHF-FR (LSOH-FR) – low smoke halogen-free, flame retardant

| Part Number | Description | EAN |
|----------------|---------------|---------------|
| 1308427034132M | 1000m on drum | 4250184148432 |

GC1000 High Screen 23 Cat.7 S/FTP LSHF Simplex/Duplex

- 10 GBit installation cable
- Pair-shielded Cat.7 AWG 23 S/FTP installation cable
- Simplex 4 pairs (PiMF) or Duplex 2x4 pairs (PiMF)
- Overall shield: tinned copper braid,
- Pair Shield: plastic composite film, aluminum coated
- Tested according to the following standards: EN 50173, ISO/IEC 11801 and EIA/TIA 568A
- Standard length: Simplex = 1000 m / Duplex = 500 m on drum
- Cable sheath: LSHF (LSOH) – low smoke halogen-free

| Part Number | Description | EAN |
|----------------|-----------------------|---------------|
| 130842703213M | Simplex 1000m on drum | 4250184127956 |
| 1308427032133M | Duplex 500m on drum | 4250184128182 |

Patch cable Cat.6_A 10G AWG 26

- Pair-shielded Cat.6_A patch cable AWG 26/7, halogen-free
- Two shielded RJ45 plugs connection, 1 - 1
- Standard lengths: 0,5; 1; 1,5; 2; 3; 5; 7 and 10m
- Additional standard lengths on request
- Class E_A tested according to ISO/IEC 11801:2011-09 and DIN EN 50173-1:2011-06
- Suitable for 10 GBit Ethernet (IEEE 802.3an)
- Molded snagless boot with integrated lever protection

| Part Number | Description | EAN |
|--------------|-------------|-------------|
| 130845xx00-E | black | xx = length |
| 130845xx33-E | grey | xx = length |
| 130845xx44-E | blue | xx = length |
| 130845xx55-E | green | xx = length |
| 130845xx66-E | red | xx = length |
| 130845xx77-E | yellow | xx = length |
| 130845xx88-E | white | xx = length |

Ordering matrix

C6_A modul

Design: Modul

| | | | | |
|--|--|--|--|--|
| Single port module | C6 _A modul 90° 130B13-E | C6 _A modul 180° 130B11-E | C6 _A modul 270° 130B12-E | |
| Patch panel | C6 _A modul 24-port 180°M 1HE 130B11P0-E | C6 _A modul 24-port 180°M 1HE Edelstahl 130B11P1-E | C6 _A modul 48-port 180°M 1,5HE Edelstahl 130B11P4-E | |
| Surface-mounted wall outlets with 180° modules | C6 _A modul 1-port 180°M AP 130B11D10002-E | C6 _A modul 2-port 180°M AP 130B11D20002-E | C6 _A modul 3-port 180°M AP 130B11D30002-E | |
| Surface-mounted wall outlets with 270° modules | C6 _A modul 1-port 270°M AP 130B12D10002-E | C6 _A modul 2-port 270°M AP 130B12D20002-E | C6 _A modul 3-port 270°M AP 130B12D30002-E | |
| Flush-mounted wall outlets with 180° modules | C6 _A modul 1-port 180°M UP 130B11D11002-E | C6 _A modul 2-port 180°M UP 130B11D21002-E | C6 _A modul 3-port 180°M UP 130B11D31002-E | |
| Flush-mounted wall outlets with 270° modules | C6 _A modul 1-port 270°M UP 130B12D11002-E | C6 _A modul 2-port 270°M UP 130B12D21002-E | C6 _A modul 3-port 270°M UP 130B12D31002-E | |
| Wall outlets for raceway installation with 180° modules | C6 _A modul 1-port 180°M UPk 130B11D11102-E UP0 130B11D11200-E | C6 _A modul 2-port 180°M UPk 130B11D21102-E UP0 130B11D21200-E | C6 _A modul 3-port 180°M UPk 130B11D31102-E UP0 130B11D31200-E | |
| Wall outlets for raceway installation with 270° modules | C6 _A modul 1-port 270°M UPk 130B12D11102-E UP0 130B12D11200-E | C6 _A modul 2-port 270°M UPk 130B12D21102-E UP0 130B12D21200-E | C6 _A modul 3-port 270°M UPk 130B12D31102-E UP0 130B12D31200-E | |
| TH35 rail mounting REGplus | REGplus IP20 C6 _A modul 180° 130B117003-E | REGplus IP20 C6 _A modul 270° 130B127003-E | | |
| Surface-mounted housing, empty | 3-port 130861-0302-E 4-port 130861-0402-E | 6-port 130861-0602-E 8-port 130861-0802-E | 12-port 130861-1202-E 16-port 130861-1602-E | |
| Underfloor installation units x = No. of ports | C6 _A modul 180°M GB2 3-, 6-, 9-port 130B11Sx0201-E | C6 _A modul 180°M GB3 3-, 6-, 9-, 12-port 130B11Sx0301-E | | |

C6_A modul K

Design: Keystone

| | | | | |
|--------------------------------------|--|---|--|---|
| Single port module | C6 _A modul K 90° 130B23-E | C6 _A modul K 180° 130B21-E | C6 _A modul K 270° 130B22-E | |
| Patch panel, empty | Module frame 24-port K, 1RU black 130A20-BK-E | Modul frame 24 Port K, 1RU 130A21-00-E | Module frame 48-port K, 1.5RU, stainless steel 130A24-00-E | |
| Wall outlets Keystone | flush-mounted 2-port K Basis 45x45 130915C1002KE | raceway 2 Port K 45x45 130915C4502KE | Wall outlet 80x80 1309151002KE - 2-port | Wall outlet 86x86 1309142502KE - 1-port 1309152502KE - 2-port |
| Underfloor installation units | subway GBV2D up to 6-port 13093EP2-E | subway GBV3D up to 9-port 13093EP3-E | GBV mounting plate 3-port 13093EPAK3-E | |

Your individual warranty packages

Use the advantages of the modular warranty package from METZ CONNECT created especially for you depending on the situation.

Warranty package 1: Advanced

With the Advanced package you are provided with a 10-year warranty on compliance with the technical properties of the C6_A modul and C6_A modul K systems and on compliance with Class E_A and the 10 Gbit transmission property according to IEEE802.3an up to 500 MHz.

Warranty package 2: Premium

The Premium warranty contains all features specified in the Advanced package. In addition, it is extended to 15 years and guarantees the transmission property of the link with a transmission property of 10 Gbits according to IEEE802.3an up to 500 MHz using the cables recommended by METZ CONNECT.

Warranty package 3: Premium plus

In the Premium plus package the Premium warranty period of 15 years can be extended to 20 years.

Requirements

To use the warranty package, the following conditions must be met:

- Assembly may only be carried out by installation firms certified by METZ CONNECT.
- A measuring and acceptance report on the link performance must be prepared for each completed installation by the certified installer.
- A test report of the link from METZ CONNECT must be available for the Advanced package.
- The Premium warranty requires the installation of cables recommended by METZ CONNECT.
- To use the Premium plus package, an additional successful acceptance measurement must be carried out by an installer certified by METZ CONNECT after the 15 years expire.

METZ CONNECT GmbH is member in the following organizations and associations.



We realize ideas

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