Work Area
Augmented Category 6

TrueNet® CopperTen™ RJ45 UTP and STP Modular Keystone Jack

The CopperTen jack is a core component of the CopperTen solution and utilised at the outlet and within the patch panel.

The key to delivering a high performing jack is to reduce the insertion loss and alien crosstalk that are prevalent at high frequencies associated with 10 Gigabit Ethernet.

A high performance PCB within the jack, together with carbon cap to mitigate alien crosstalk, have produced a leading edge component necessary to deliver the high performance demanded.

The CopperTen jack utilises punchdown terminations onto LSA-PLUS® contacts to ensure swift installation.

UTP

STP

Features

- Supports 10 Gigabit Ethernet over unshielded copper to a full 100m up to 500MHz
- Exceeds the requirements of IEEE 802.3an (10GBASE-T) and ISO/IEC 11801:2002 amendment/channel requirements
- Keystone design ensures compatibility with a range of keystone faceplates and adaptors
- Maximises productivity levels with 10 times the data throughput of Category 6
- True future proofing for tomorrow's network applications
- T-568A/B wiring
- Covered by the TrueNet® System Warranty

Ordering Information

Description	Catalogue Number
Modular Jack, Augmented Category 6 Keystone UTP, Pure White (Pack of 1)	6830 1 885-01
Modular Jack, Augmented Category 6 Keystone UTP, Black (Pack of 1)	6830 1 885-04
Modular Jack, Augmented Category 6 KM8 STP (Pack of 1)	6830 1 810-0X
Modular Jack, Augmented Category 6 KM8 STP (Bag of 8)	6830 2 711-0X

***For X use:**

1 = White
2 = Ivory
3 = Grey
4 = Black

Augmented Category 6 Modular Keystone Jack suitable for

Keystone 25x50 Angled Adaptor: 6538 4 111-05 (see page 6.50)
LJ6C Keystone Adaptor: 6830 2 402-00 (see page 6.52)
Keystone Faceplates: 6538 3 111-03/04 (see page 6.53)
Keystone Faceplate 45x45: 6690 1 825-00 (see page 6.55)

Work Area
Augmented Category 6 – Modular Jacks

TrueNet® CopperTen™ RJ45 UTP and STP Modular Keystone Jack

Technical Specification

Electrical Data

	UTP	STP
Insulation resistance at +60°C and 93% relative humidity	≥ 1GΩ	≥ 500mΩ
Dielectric strength	Contact / contact ≥ 1.0kV DC	Contact / contact 1.0kV Contact / shield 1.5kV
Current carrying capacity	≥ 1A	≥ 1A
Typical plug / jack contact resistance	≤ 20mΩ	≤ 20mΩ
Typical IDC contact resistance	≤ 5mΩ	≤ 1mΩ
Conductor terminations of LSA-PLUS® contacts	≥ 200	≥ 30
Conductor diameter	0.5-0.65mm (AWG 24-22)	0.5-0.65mm (AWG 24-22)
Insulation diameter	0.7-1.6mm	0.7-1.6mm
Shield connection		Patented 360° shielding

Mechanical Data

Plug / jack mating cycles	≥ 750 (IEC/EN 60603-7)	≥ 750 (IEC/EN 60603-7)
Plug / jack insertion / withdrawl force	≤ 20N (IEC/EN 60603-7)	≤ 20N (IEC/EN 60603-7)
Operating temperature range	-10°C to +60°C	-10°C to +60°C
Operating humidity range	≤ 95% R.H. non condensing	≤ 95% R.H. non condensing

Testing Requirements

Connection technology	ISO/IEC 11801:2002 ANSI/TIA/EIA-568-B.2-1 EN 50173-1:2002
Channel testing	Latest ISO/IEC 11801:2002 Amendment/channel requirements

Work Area

Augmented Category 6 – Distribution Boxes

TrueNet® CopperTen™ UTP Mini Pod

Designed to help simplify the cabling of raised floor work spaces and is ideal for high density environments, such as desk clusters, call centres and dealer desks.

Dimensions

60 x 63 x 200mm

Specification of the Plastic Housing

Casing: ABS UL 94 V0

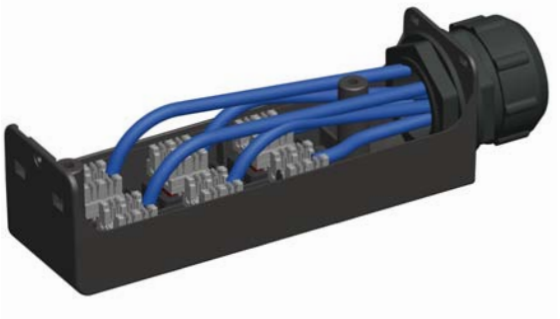
Test Specification

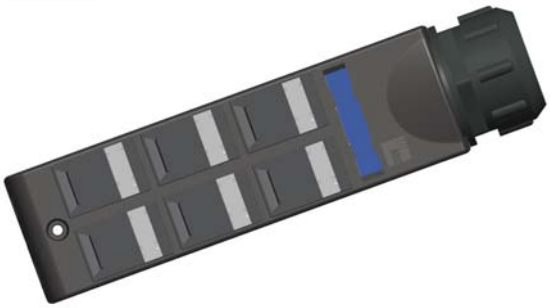
Connection technology

ISO/IEC 11801:2002
ANSI/TIA/EIA-568-B.2-1
EN 50173-1:2002

Channel Testing

Latest ISO/IEC 11801:2002
Amendment/Channel Requirements





Features

- Performance exceeding Augmented Category 6 specifications
- Can be passed through minimum 127mm (5 inch) floor grommets
- Terminations will not be disturbed during repositioning of enclosure, due to external mounting points
- Ideal as a consolidation point with portability without the need to re-enter the enclosure
- Utilises the CopperTen punch down jack and is available in 4 port and 6 port variants
- Sealed unit and shuttered ports provide dust protection
- Provision for a 40mm gland style fixing to be used in conjuction with flexible conduit
- Covered by the TrueNet System Warranty

Ordering Information

Description	Catalogue Number
Mini Pod, Augmented Category 6 CL UTP, 4 Port	6540 1 679-04
Mini Pod, Augmented Category 6 CL UTP, 6 Port	6540 1 679-06

Work Area

Augmented Category 6 – Loaded Faceplates

TrueNet® CopperTen™ RJ45 UTP and STP Outlet UK Style

UK style faceplates featuring the CopperTen Keystone jack satisfying Augmented Category 6 requirements.

CopperTen outlets available in 2 and 4 port variants.

Dimensions

86 high x 86 wide x 16mm deep

Features

- Supports 10 Gigabit Ethernet over unshielded copper to a full 100m up to 500MHz
- Exceeds the requirements of IEEE 802.3an (10GBASE-T) and channel requirements of ISO/IEC 11801:2002 amendment
- Comes complete with jacks, faceplates and adaptors
- Maximises productivity levels with 10 times the data throughput of Category 6
- True future proofing for tomorrow's network applications
- Covered by the TrueNet System Warranty

Ordering Information

Description	Catalogue Number
Loaded Faceplate, Augmented Category 6 UTP, Double	6540 1 812-11
Loaded Faceplate, Augmented Category 6 UTP, Quad	6540 1 812-12
Loaded Faceplate, Augmented Category 6 STP, Double	6540 1 812-08
Loaded Faceplate, Augmented Category 6 STP, Quad	6540 1 812-10

Work Area

Augmented Category 6 – Loaded Faceplates

TrueNet® RJ45 CopperTen™ KM8® Outlets 50x50 European Style STP

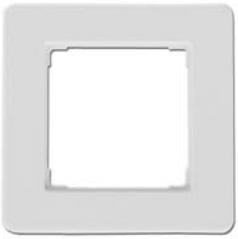
The European style 50x50 faceplates feature the component compliant modular KM8 jack for LAN cabling systems satisfying Augmented Category 6 requirements.

Test Specification

Exceeds specifications according to ISO/IEC 11801:2002, EN 50173-1:2002 and TIA/EIA 568-B

Dimensions

80 high x 80 wide x 24mm deep



Features

- Supports 10 Gigabit Ethernet over shielded copper to a full 100m up to 500MHz
- Exceeds the requirements of IEEE 802.3an (10GBASE-T) and channel requirements of ISO/IEC 11801:2002 amendment
- Comes complete with jacks, faceplates and adaptors
- Maximises productivity levels with 10 times the data throughput of Category 6
- True future proofing for tomorrow's network applications
- Covered by the TrueNet® System Warranty

Ordering Information

Description	Catalogue Number
Loaded Faceplate, Augmented Category 6 KM8 STP, Double, Pure White	6690 1 581-51
Loaded Faceplate, Augmented Category 6 KM8 STP, Double, Ivory	6690 1 581-02
Cover Frame to adapt outer dimensions of 50x50 outlet to 80x80, Pure White	6690 1 725-01
Cover Frame to adapt outer dimensions of 50x50 outlet to 80x80, Ivory	6690 1 725-00

Work Area

Augmented Category 6 – Patch Cords

TrueNet® CopperTen™ LSZH UTP and S/FTP Patch Cords

The CopperTen unshielded (UTP) and shielded (S/FTP) patch cord completes the Augmented Category 6 solution and is used at the work area or in the Data Centre/communications room.

The patch cord is designed to reduce insertion loss and alien crosstalk that are prevalent at high frequencies associated with 10 Gigabit Ethernet.

The high performance plug is designed with an integrated strain relief boot that prevents the cable from moving at the termination point when the cable is flexed. The strain relief boot also ensures that the correct bend radius is maintained.

The copper conductors held within the cable pairs are stranded for superior flexibility and are compacted for optimum signal strength.

Features

- Supports 10 Gigabit Ethernet to a full 100m
- Exceeds the requirements of IEEE 802.3an (10GBASE-T) and ISO/IEC 11801:2002 amendment/channel requirements
- Superior cable flexibility from stranded cores
- Boot maintains correct bend radius to ensure maximum performance
- Maximises productivity levels with 10 times the data throughput of Category 6
- True future proofing for tomorrow's network applications
- Covered by the TrueNet® System Warranty

Ordering Information

Description	Cable Colour/Type	Catalogue Number*
Augmented Category 6 LSZH Patch Cord	Blue LSZH UTP 1.0m	6645-2-827-04
	Blue LSZH UTP 2.0m	6645-2-827-07
	Blue LSZH UTP 3.0m	6645-2-827-10
	Blue LSZH UTP 5.0m	6645-2-827-15
	Blue LSZH UTP 7.5m	6645-2-827-25
	Blue LSZH UTP 10m	6645-2-827-33
	Blue LSZH S/FTP	6830 2 861-*XX*
	Red LSZH S/FTP	6830 2 862-*XX*
	Yellow LSZH S/FTP	6830 2 863-*XX*
	Green LSZH S/FTP	6830 2 864-*XX*
	Orange LSZH S/FTP	6830 2 865-*XX*
	Grey LSZH S/FTP	6830 2 867-*XX*
RJ45 plug to RJ45 plug, T568B 		

Contact ADC KRONE for additional cable colours and lengths.

See following page for technical specifications.

Work Area
Augmented Category 6 – Patch Cords

TrueNet® CopperTen™ LSZH UTP and S/FTP Patch Cords

Technical Specifications

Mechanical Data

	UTP	S/FTP
Operating temperature range:	-20°C to 75°C	-10°C to 60°C
RJ45 plug interface according to:	IEC 60603-7	IEC 60603-7 series (= 750 mechanical operations)
Conductor:	24 AWG 7x32 stranded tinned copper	S-STP / S-FTP: AWG26
Jacket:	LSZH (EN 60754-1 & -2)	LSZH (EN 60754-1 & -2)
Nominal outer diameter:	7.7mm	S-STP / S-FTP 6.0mm ± .13mm

Compliances

Safety rating:	IEC/EN 60950 LVD compliant	IEC/EN 60950 LVD compliant
Flammability rating:	IEC 60332-1	S/FTP: IEC 60332-3

Testing Requirements

Connection technology	ISO/IEC 11801:2002 ANSI/TIA/EIA-568-B.2-1 EN 50173-1:2002	ISO/IEC 11801:2002 TIA-568-B.2-1 & -6 EN 50173-1:2002 IEC/EN 61935-2
Channel testing	Latest ISO/IEC 11801:2002 Amendment/channel requirements	Latest ISO/IEC 11801:2002 Amendment/channel requirements