



The R&M Cat.6 CL connection module is ideal for voice, fast data transmissions and high bandwidth applications. This high-performance Cat.6 module is perfect for use in 2.5 Gigabit Ethernet (2.5GBASE-T) and future high-speed applications up to 250MHz.

## Features of Cat. 6 CL Module

- Meets the Cat.6 ISO and TIA component specification for the entire re-embedded plug range as specified by the standards ISO/IEC 11801, EN 50173, TIA/EIA 568.2-D, IEC 60603-7-4 and 60603-7
- Meets the IEEE 802.3bz requirements for 2.5GBASE-T performance
- Achieves best transmission characteristics with R&Mfreenet Cat. 6 patch cables
- Gold-plated contact area and tin-plated insulation displacement contact area
- Capacitive and inductive compensation
- Compatible with Cat. 6 standard patch cords and cables
- Full mechanical and electrical backward compatibility with Cat. 5e
- Fits into 3<sup>rd</sup> party outlets and patch panels by using 4 different adapters
- Connection of installation cables of AWG 22-26 plus stranded cables of AWG 22/7 – 26/7
- Wiring option according to TIA/EIA 568 A and B
- Halogen-free materials, ROHS II
- Supports PoE (IEEE 802.3af), PoEP (IEEE 802.3at), 4Ppoe (IEEE 802.3bt) and is compatible to IEC 60512-99-001/002



## Standards

IEC 60603-7

ISO/IEC 11801

EN 50173-1

## Technical Data

Criteria	Date / value
Operating temperature range	-10°C to +60°C (14°F to 140°F)
Storage temperature range	-40°C to +70°C (-40°F to 158°F)
Humidity	95% (non-condensing)
Contact material	CuSn
Contact surface	> 0.76 µm (0.029 mil) gold over >1.2 µm (0.047 mil) nickel
Housing material	Polycarbonate (UL-94-V0)
Number of IDC connections	8 / jack
IDC contact material	CuSn, tin-plated
Admissible wire Ø	0.4mm (0.016 inch) (AWG26) – 0.65mm (0.026 inch) (AWG22)
Admissible strand Ø	AWG26/7 – AWG22/7
Admissible insulation Ø	0.8 mm – 1.6 mm (0.032 inch – 0.063 inch)
Admissible cable Ø	4.5 mm - 9.0mm (0.18 inch - 0.35 inch)
Wire strain relief	Through termination block
Cable strain relief	Cable tie on integrated anchorage tray

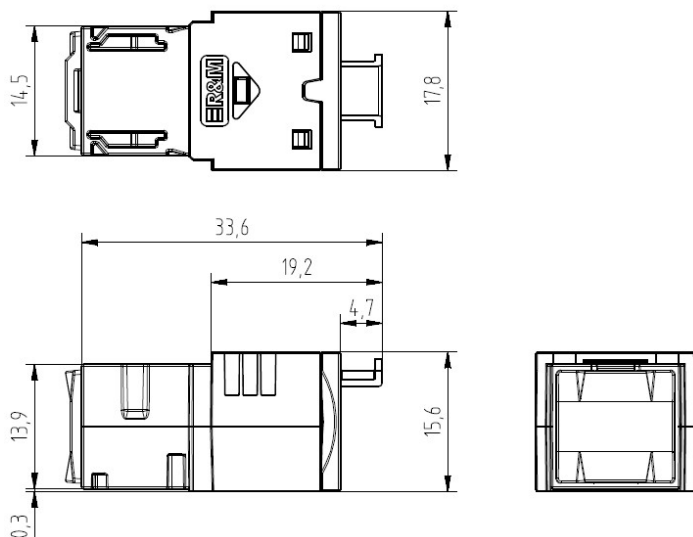
## IDC Insulation Displacement Contact

Description	Standard value	Relevant Standard	Typical value (at 20°C)
Mating cycles min.	> 750	ISO/IEC 11801	1000
IEC 60352-3	Termination block design for one time termination		






## Electrical Data

Description	Standard value	Relevant standard	Typical value (at 20°)
Electric strength			
Contacts	1000V DC or AC peak	IEC 60603-7	1200V DC
Contact to shield	1500V DC	IEC 60603-7	1700V DC
Insulation resistance	> 500MΩ (100V DC)	IEC 60603-7	5GΩ (100V DC)
Contact resistance	< 20mΩ	IEC 60603-7	< 5mΩ
I/O resistance	< 200mΩ	IEC 60603-7	30mΩ
I/O resistance unbalance	< 50mΩ	IEC 60603-7	20mΩ
Current carrying capacity	1A @ 60°C	IEC 60603-7	Pass

## Dimensions



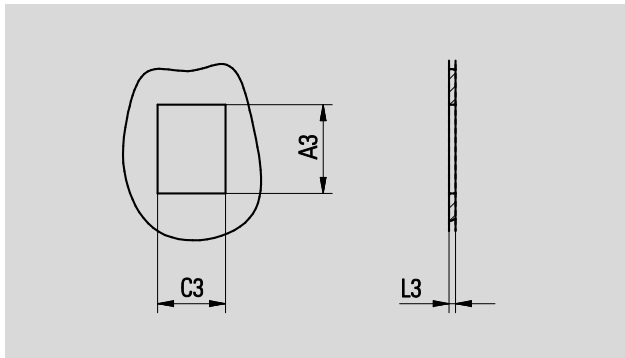
**Available Adapters**

Freenet	Keystone IEC	Adapter No.1 (UTP only)	Snap-In
	A3/L3: see below, STP/UTP different 		
	Keystone LARGE 20.3mm (UTP only)		
	A3: 20.1 – 20.9mm L3: 1.20 – 1.95mm 		

**IEC Keystone cut-out**

The keystone adapter ensures that the module will fit in keystone cut-outs as defined in IEC60603-7 ed. 3 Annex D.

**Dimensions IEC Keystone**



Letter	IEC standard values		Adapter capabilities	
	Maximum (mm)	Minimum (mm)	STP (mm)	UTP (mm)
A3	19.61	19.30	19.3 - 19.6	19.3 - 19.7
C3	15.04	14.78	n.a.	n.a.
L3	1.54	1.22	1.22 – 1.80	1.20 – 1.95