# R&Mfreenet Cat.5e Connection Module





The R&M*freenet* Cat.5e connection modules, part of the Freenet cabling system, are ideal for voice, fast data transmissions and high bandwidth applications. This high performance Cat.5e module is perfect for use in 1 Gigabit Ethernet (1GBASE-T) up to 100MHz.

#### Features of Cat.5e Modules

- Exceeds the Cat 5e specification (mated) for the entire de-embedded plug range as specified by the standards (ISO/IEC 11801, EN 50173 and TIA/EIA 568C)
- Attains Cat 5e values together with Cat 5e patch cables, as specified in standard IEC 11801
- Achieves best transmission characteristics with R&Mfreenet Cat.5e patch cables
- Gold-plated contact area and tin-plated insulation displacement contact area
- Capacitive and inductive compensation
- Compatible with Cat.5e standard patch cords and cables
- 360° shield coverage with shielded module
- RJ-11 compatible
- Fits into 3<sup>rd</sup> party outlets and patchpanel using specific adapters
- Tool-free (w/o special tools) connection of installation cables of AWG 22-26 plus stranded cables of AWG 22/7 – 26/7
- Allows connection of cable with larger or smaller AWG with use of the Screw Clip (R35293)
- Wiring option according to TIA 568 A and B with parallel termination of the pairs without splitting of pair 3,6
- Label with color wiring chart, integrated production date for quality tracking
- Halogen-free materials, ROHS II
- 360° shield coverage with sielded module
- Supports PoE (IEEE 802.3af), PoEP (IEEE 802.3at), 4PpoE (IEEE 802.3bt) and is compatible to IEC 60512-99-001/002
- 3P and UL certified
- Shielded version DNV-GL certified



#### **Standards**

IEC 60603-7	
ISO/IEC 11801	
EN 50173-1	



## **Technical Data**

Criteria	Date / value
Operating temperature range	-10°C to +60°C
Storage temperature range	-40°C to +70°C
Humidity	95% (non-condensing)
Contact material	CuSn
Contact surface	>0,76 µm gold over >1,2 µm nickel
Housing material	Polycarbonate (UL-94-V0) plus CuSn (tin-plated) for shielded version
Number of IDC connections	8 / jack
IDC contact material	CuSn, tin-plated
Admissible wire Ø	0.4 mm (AWG26) – 0.65 mm (AWG22)
Admissible strand Ø	AWG26/7 – AWG22/7
Admissible insulation Ø	0.8 mm – 1.6 mm
Wire strain relief	Through labyrinth in IDC block
Cable strain relief	Through cable tie
Shield contact on plug	2 contact pins for flat-head plug 4.8 x 0.5mm (shielded version only)

# **IDC Insulation Displacment Contact**

Description	Standard value	Relevant Standard	Typical value (at 20°C)
Mating cycles min.	> 750	ISO/IEC 11801	> 1000
IEC 60352-3*	≥ 20		

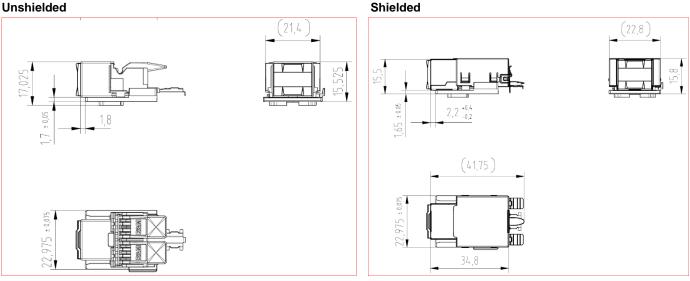
\*Re-terminations may be performed with wire of either same or larger size than originally terminated.

# **Electrical Data**

Description	Standard value	Relevant standard	Typical value (at 20°)
Electric strength	1000V DC or AC peak	IEC 60603-7	> 1000V DC
Insulation resistance	> 500MΩ (100V DC)	IEC 60603-7	> 500MΩ (100V DC)
Contact resistance	< 200mΩ	IEC 60603-7	< 50mΩ

# **Dimensions (Freenet)**

## Unshielded



## **Available Versions**

Freenet, Snap-In, Special

