

### Cat.6A Patch Cords

R&Mfreenet Cat.6A high end patch cords are used for connecting the network equipment to patch panels and telecommunications outlets. Using the patented R&M RJ45 plug with its unique IDC technology they are suitable for power delivery (PoE) up to the highest levels. They are suitable for high data rate applications and frequencies of up to 500 MHz.

### Features of Cat.6A Patch Cord

- Fulfills the requirements of Category 6A, Class EA (500MHz) according to the present standard of the ISO/IEC 11801
- Complies with the Category 6A specifications of the IEC 60603-7-41 / IEC 60603-7-51 components standard with the Cat.6A connection module
- Supports PoE (IEEE 802.3af), PoEP (IEEE 802.3at), 4PpoE (IEEE 802.3bt) and is compatible to IEC 60512-99-001/002
- The flexible cable meets the extended TCL specification of level 2 according to IEC 61156-6 for frequencies above 100 MHz
- IDC wire termination according to IEC 60352-3
- Tested according to IEC 61935-2
- Strain relief according to TIA/EIA 568.2-D
- Each individual patch cord is tested
- Can also be used as Cat.5e or Cat.6 (backwards compatible)
- Slim plug dimensions: 41.1 x 11.7 x 6.6mm (length x width x depth)
- Ultra stable strain relief
- Lengths from 0.2 to 20m available
- Impedance of 100Ω
- LSZH and LSFRZH versions
- R&M security system and colour coding
- R&M environment system
- 3P certified (in channel)



### **Cat.6A Patch Cords Data Sheet**

### **Materials**

Plug Housing	Contacts	Contact Plating	Shielding
UL 94-V0 polycarbonate	Bronze (CuSn6)	0,7 µm selective gold plate	Tin-plated brass

### **Electrical Characteristics**

General	Current Rating	Dielectric Withstanding Voltage	Insulation Resistance @20°C 500VDC
Compliant to 60603-7	1.5A @ 25°C	1000 VDC	5000 M $\Omega$ * km

### Mechanical Characteristics Environmental Characteristics

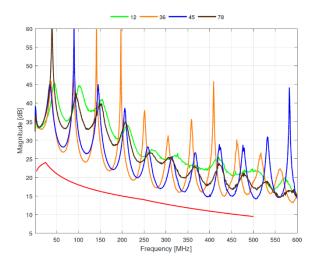
Mechanical Onaracteristics	Environmental Characteristics
Plug Tolerances and Dimensions	Operating Temperature
Compliant to IEC 60603-7	-20°C to +60°C



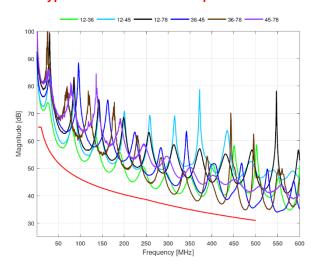
## **Patch Cord Characteristics Cat.6A**

	U/UTP	S/FTP
Inner conductor diameter	AWG26/7	AWG26/7; AWG26/1
Number of pairs	4	4
Screen per pair	None	AL/ Foil
Outer screen	None	Cu-braid
Jacket	LSZH	LSFRZH; LSZH
Bending radius	≥35mm operation (without load) ≥60mm installation (with load)	≥35mm operation (without load) ≥60mm installation (with load)
Outer diameter	max. 6.0 mm	max. 6.0 mm
Wiring method	standard: TIA568A, optional: TIA568B or crossover	
Jacket colours	grey, yellow, red, blue, green, orange, black, white, violet*, heather violet* (* in shielded version only)	

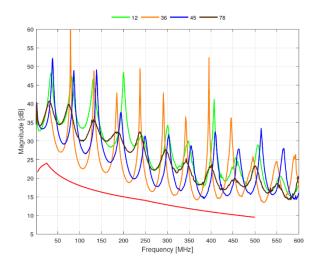
## Typical Return Loss Cat.6A U/UTP patch cord 2m



## Typical NEXT Cat. 6A U/UTP patch cord 2m



# Typical Return Loss Cat. 6A S/FTP patch cord 2m



# Typical NEXT Cat. 6A S/FTP patch cord 2m

