The latest generation of network cables

25/40GBASE-T and Category 8 with up to 2 GHz over twisted pair cables

Ever faster transmission rates and the increasing use of "intelligent" mobile devices demand ever higher data rates. Fibre optic solutions are more cost-intensive, require the restructuring of all of the components or are difficult to deploy across the board. Put simply: the four-pair, symmetrical CAT8 copper components enable high bandwidths, low cable attenuation and can save costs and space at the ports by combining 10 Gbit/s Base-T links.

Overview: Categories and standardisation bodies

Category 8 cabling components are specified in the USA in ANSI/TIA associations. The ISO/IEC standardisation body has specified two variants of category 8.1 and 8.2, which are valid worldwide. The different components have different link classes and backward compatibility.
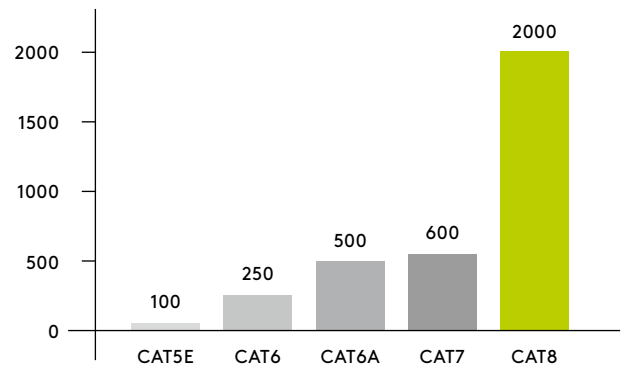
Category	Standardi-sation body	Link class	Max. frequency	Validity	25/40 GBASE-T	compatible with RJ45	Backward compatibility with...
CAT8	ANSI/TIA	CAT8 link	2 GHz	USA	yes	yes	...categories 6A, 6 and 5E
CAT8.1	ISO/IEC	I		worldwide			
CAT8.2		II				no	...categories 7A and 7

Improved shielding

The twisting of double-shielded copper cables (called twisted pair cables) improves protection against electrical and magnetic interference. In the new CAT8.1 range, the wire pairs are shielded against each other with S/FTP, have additional overall braiding and thus offer improved protection.

Higher data transmission

CAT8.1 cables offer up to 2000 MHz for the high bandwidth requirements in data centres and storage networks. The innovative RJ45 connectors with flexible latch and latch protection transmit class G and are backward-compatible.
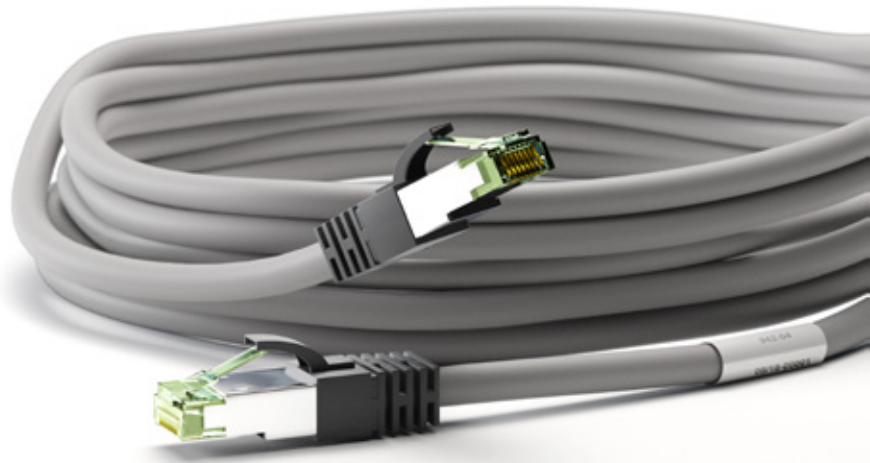
CAT8 frequency support (Mhz) = 4 times of CAT6A cabling

Length and colour individually selectable

Offer your customers the widest possible choice: The Goobay range includes CAT 8.1 cables in four colours (grey, black, white, blue) and five lengths (7.5 m - 25 m).

Goobay® network cables with a length of more than 5 meters are called "RJ45 (CAT 6A, 500 MHz) patch cord with CAT 8.1 S/FTP raw cable" according to the test criteria, even if they originally offer a significant increase in performance compared to CAT 6A patch cables even over longer distances.

Goobay

RJ45 (CAT 6A, 500 MHz) patch cord with CAT 8.1 S/FTP raw cable

LSZH halogen-free, AWG24, CU material

- Appropriate for 25/40G Base-T Ethernet networks (40GB-capable) and downward compatible
- Cat 8.1 raw cable up to 2000 MHz / 2 GHz
- New type of RJ45 plug as per industry standard with 50μ gold-plated contact surfaces (PINs)
- Shielded RJ45 plug with latch and latch protection
- Double-shielded LAN/network cable: wire pair shielding: PIMF (pair in metal foil) + overall shielding: mesh
- Length specification on Slimline anti-kink sleeve

GENERAL

Markings	WEEE, CE
Material	LSZH

SIGNAL TRANSMISSION

max. bandwidth	2000 MHz

CABLE

Specification	CAT 8.1
Cable type	Cat 8.1 raw cable
Inner conductor material	CU (copper)
AWG	24/7 (stranded)
Shielding class	S/FTP (PiMF)
Number of shieldings	2 x
Type 1, shielding	foil (alu) PiMF
Type 2, shielding	braid (alu) overall shield
Material cable sheath	LSZH
Cable sheath diameter (approx.)	8.2 mm
LSZH compliant	yes
Kink protection	both sides
inner conductor, core diameter	0.2

CONNECTIONS

Connection, type	RJ45 industry female (8P8C)
Connection, shielding	yes
Connection 2, type	RJ45 industry female (8P8C)
Connection, housing material	PVC
Connection, contact material	gold-plated 50μ
Latch protection	both sides
Contacting	EIA/TIA-568B

CABLE LENGTH	GREY	BLACK	WHITE	BLUE
	Bulk	Bulk	Bulk	Bulk
7.50 m	55140	66725	55128	45663
10.00 m	55141	66726	55129	45664
15.00 m	55142	66727	55130	45665
20.00 m	55143	66728	55131	55119
25.00 m	55144	66729	55132	55120

Product and packaging images may vary. Errors and omissions excepted.