NETWORK CABLE · DATA CENTER SERIES

CAT8 S/FTP Network Cable

22 AWG (0.64 mm) · Full Copper · Grey PVC Jacket · 100 m

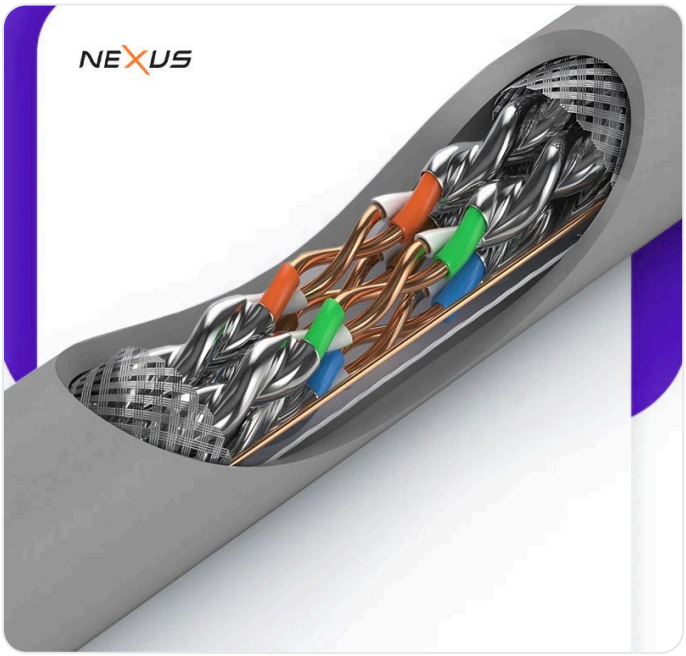
Built for the highest-speed copper links in the rack, the Nexus CAT8 S/FTP 22AWG cable delivers 25G/40GBASE-T performance at 2000 MHz over channels up to 30 m — the standard distance for data center and server-room connections. Heavy 22 AWG solid bare-copper conductors, a foil screen on every pair and an overall braided shield give maximum noise immunity, lower insertion loss and cooler PoE runs. Every reel is individually Fluke® test-certified, so what you install is what you get.



- 99.99% pure bare-copper conductors · 22 AWG (0.64 mm)
- 40 Gbps transfer rate at 2000 MHz bandwidth (up to 30 m)
- Fully backward compatible with CAT6A / CAT6 / CAT5e
- Full S/FTP double shielding + earth/grounding wire
- Flame-retardant grey PVC jacket for indoor installation
- Supports PoE / PoE+ / PoE++ (IEEE 802.3af / at / bt)
- Guaranteed Fluke Pass certification on every box

AVAILABLE IN

100 m Box



INSIDE — S/FTP CONSTRUCTION



CUT DETAIL — 22AWG BARE COPPER

Cable Construction

Inside the CAT8 S/FTP cable — six engineered layers

01 Full Bare Copper Conductor
Solid 22 AWG (0.64 mm), 99.99% pure copper

02 Twisted Pairs
4 precision-twisted pairs for crosstalk control

03 Aluminium Foil — per Pair
Individual foil screen around each pair (FTP)

04 Overall Braided Shield
Tinned-copper braid for full S/FTP shielding

05 Earth / Grounding Wire
Drain wire for fast, reliable earthing

06 PVC Jacket
Flame-retardant grey PVC outer jacket (indoor)

STANDARDS & COMPLIANCE

ISO 9001 | ISO/IEC 11801-1 Class I | ANSI/TIA-568.2-D Cat 8 | IEC 61156 | RoHS | CE | IEC 60332-1 | Fluke® Tested

Performance

Engineered for the shortest, fastest links in your network



Distance matters with CAT8

40 Gbps at 2000 MHz is specified for channels up to 30 m (24 m permanent link + patching), as defined by ANSI/TIA-568.2-D. CAT8 is designed for switch-to-server and top-of-rack links. For 10 Gbps horizontal runs up to 100 m, choose NEXUS CAT6A or CAT7.

TYPICAL APPLICATIONS

- Data centers & server rooms
- Top-of-rack / end-of-row
- High-speed backbone patching
- Broadcast & AV over IP
- Switch-to-server links
- Storage & NAS networks
- High-power PoE devices
- Labs & test environments

Technical Specifications

GENERAL & MECHANICAL

Category	CAT8 (Category 8.1 / Class I)
Cable Type	S/FTP (Shielded Foiled Twisted Pair)
Conductor Material	100% Bare Copper, solid
Conductor Size	22 AWG (0.64 mm)
Shielding	Al foil per pair + overall braided screen + grounding wire
Bandwidth	2000 MHz
Max Data Rate	40 Gbps (up to 30 m channel)
Characteristic Impedance	100 Ω ± 15%
Jacket Type	PVC — flame retardant, Indoor (Grey)
Outer Diameter	8.0 mm ± 0.2 mm
Fire Rating	IEC 60332-1
Testing	Fully Fluke® tested to 2000 MHz — passes all field certification
Compliance	ISO/IEC 11801-1, ANSI/TIA-568.2-D, IEC 61156, RoHS, CE
PoE Support	IEEE 802.3af / at / bt (PoE / PoE+ / PoE++)
Operating Temperature	-20°C to +60°C
Length / Packaging	100 m box

ELECTRICAL CHARACTERISTICS

PROPERTY	UNIT	TYP / MAX
Conductor Resistance (DC)	Ω/100 m	**Max. 5.8**
Resistance Unbalance (within pair)	%	**Max. 2**
Mutual Capacitance (at 1 kHz)	nF/100 m	**5.6**
Capacitance Unbalance (pair to ground)	pF/100 m	**Max. 160**
Dielectric Strength	V DC (2 sec)	**1200 V**

40Gbps
DATA RATE

2000MHz
BANDWIDTH

22AWG
CONDUCTOR

100m
BOX