Cat6A S/FTP CMR Pre-Terminated Copper Trunk

6 × RJ45 Female / Female | 10 ft (3 m) | Shielded 10GBASE-T | CMR Riser-Rated PVC



1. GENERAL DESCRIPTION

Cat6A S/FTP pre-terminated copper trunk is a factory-assembled, factory-tested link made of six Category 6A shielded cables bundled together and terminated at both ends with shielded RJ45 female jacks. Each end therefore provides six ports (6 × RJ45 F/F), so six 10 Gigabit channels can be run between two patch panels, cassettes or racks in a single, tidy pull. The S/FTP construction (individually foil-screened pairs plus an overall braid) and CMR riser-rated jacket make it suitable for data centres and building risers, saving installation time and ensuring consistent, tested performance.

2. KEY FEATURES

- Plug-and-play: six pre-terminated, pre-tested channels in one trunk, with RJ45 female jacks at both ends
- Cat6A S/FTP shielded cable (500 MHz) for 10GBASE-T over 100 m with high EMI and alien-crosstalk immunity
- CMR riser-rated PVC jacket for use in building riser and vertical-shaft installations [confirm listing]
- Fixed length 10 ft (3 m); other lengths available on request
- Shielded RJ45 jacks bonded to the cable screens for continuous grounding, each port numbered 1–6
- 100 % factory tested: wiremap, continuity and shield; test report available

3. APPLICATIONS

- Data centre trunking between equipment racks, patch panels and cassette housings
- Backbone / horizontal link between telecom rooms; 10GBASE-T, 1000BASE-T and PoE / PoE++ connections
- Rapid deployment, moves-adds-changes and structured-cabling upgrades

4. APPLICABLE STANDARDS & COMPLIANCE

- ANSI/TIA-568.2-D — Category 6A cable and connecting hardware
- ISO/IEC 11801 — Class EA generic cabling; IEC 61156-5 (cable); IEC 60603-7-51 (shielded RJ45 jack)
- UL 444 / NEC Article 800 — Type CMR (riser) communications cable [confirm listing and file no.]
- UL 1666 — Vertical shaft flame test; RoHS [Compliant — Directive 2011/65/EU]

5. CONSTRUCTION & MATERIALS

Trunk Configuration	6 × Cat6A S/FTP cables, bundled, [loose / sleeved in protective braided sleeve]
Cable	Cat6A S/FTP, 4 pairs, solid [23 AWG] bare copper

Pair Screening	Individual Al/PET foil on each pair, overall tinned copper braid
Outer Jacket	CMR-rated PVC (riser), colour [Grey / Blue]
Connector — End A	6 × shielded RJ45 (8P8C) Cat6A female jacks, [in-line coupler / module housing]
Connector — End B	6 × shielded RJ45 (8P8C) Cat6A female jacks, [in-line coupler / module housing]
Jack Contacts	Phosphor bronze, gold-plated — [50 µin / 1.27 µm]
Wiring	Straight-through, T568B, 1:1 at both ends
Labelling	Port numbers 1–6 at each end; [cable ID label]

6. ELECTRICAL CHARACTERISTICS (PER CHANNEL)

Characteristic Impedance	100 Ω ± [15 Ω]
Max. DC Resistance (per conductor)	[≤ 9.38 Ω/100 m, scaled to length]
Max. DC Resistance Unbalance	5 %
Rated Frequency	Up to 500 MHz (Category 6A)
Contact Resistance (jack)	[≤ 20 mΩ]
Insulation Resistance	[≥ 500 MΩ]
Dielectric Withstand (1 min)	[1000 V AC]
Max. Operating Voltage	[72 V]

7. TRANSMISSION PERFORMANCE

Frequency (MHz)	Cable IL — max (dB/100 m)	Cable NEXT — min (dB)	Cable PS NEXT — min (dB)
1	2.1	74.3	72.3
4	3.8	65.3	63.3
10	5.9	59.3	57.3
31.25	10.5	51.9	49.9
62.5	15.0	47.4	45.4
100	19.1	44.3	42.3
250	31.1	38.3	36.3
500	45.3	33.8	31.8

8. INSTALLATION & HANDLING GUIDELINES

- Pull the trunk by the cable bundle using the protective pulling sock; never pull by the jacks or connector housings.
- Do not exceed the min. bending radius (8 × OD) or the max. pulling tension, and avoid kinks, crushing and tight cable ties.
- Mount each end jack module in a compatible shielded patch panel or cassette housing and ground the panel to the rack earth.
- Use Cat6A (or higher) shielded patch cords to connect equipment, and keep total channel length within 100 m (max. 10 m of patch cords).
- Keep data cables separated from power cables per EN 50174-2 / TIA-569, and test every channel after installation.