

23 AWG Solid Copper, Unshielded Twisted Pair, LSZH/PVC Jacket — DHRUVA Connect

1. Product Overview

The DHRUVA Connect Category 6A U/UTP LAN cable is an enhanced-performance, unshielded copper cabling solution engineered for the transmission of high-speed data, and analogue and digital voice/video (RGB) signals over local area networks (LANs). The cable supports Gigabit and 10 Gigabit Ethernet (10GBASE-T) applications and is rated for operation at a bandwidth of up to 250 MHz.

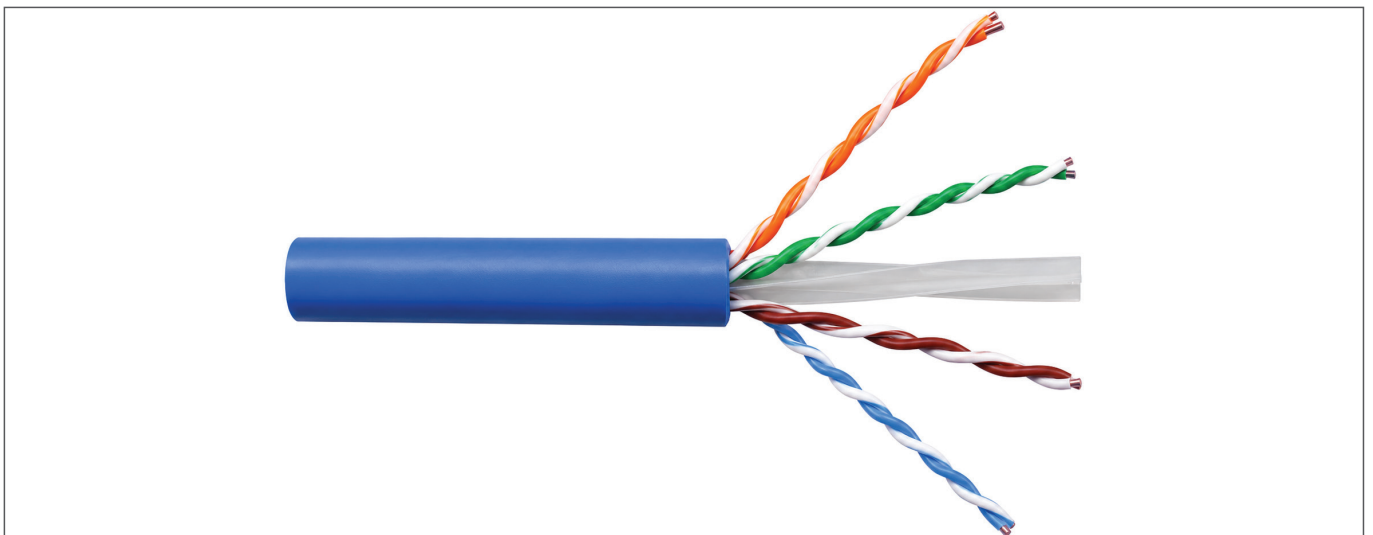
As an unshielded (U/UTP) design, the cable omits foil or braid screening, offering a lighter, more flexible, and more cost-effective alternative to shielded CAT 6A cabling for environments with low electromagnetic interference. A PE cross-web separator maintains consistent pair geometry and helps control crosstalk without the added bulk of a metallic shield. Construction and transmission performance meet or exceed the requirements of ISO/IEC 11801 and ANSI/TIA-568-C.2.

2. Key Features

- Fully compliant with Category 6A (CAT 6A) performance specifications at 500 MHz.
- 4-pair unshielded twisted pair (U/UTP) construction for lightweight, flexible installation.
- 23 AWG solid bare-copper conductors for low insertion loss and reliable long-run conductivity.
- High-Density Polyethylene (HDPE) insulation with PE central cross-web separator.
- Flame-retardant (FR) PVC or Low Smoke Zero Halogen (LSZH) jacket options.
- Packaged in an easy-pull box for simplified, snag-free installation.
- Also available on a wooden drum in 500 m put-ups for large-scale cabling projects.

3. Cable Construction

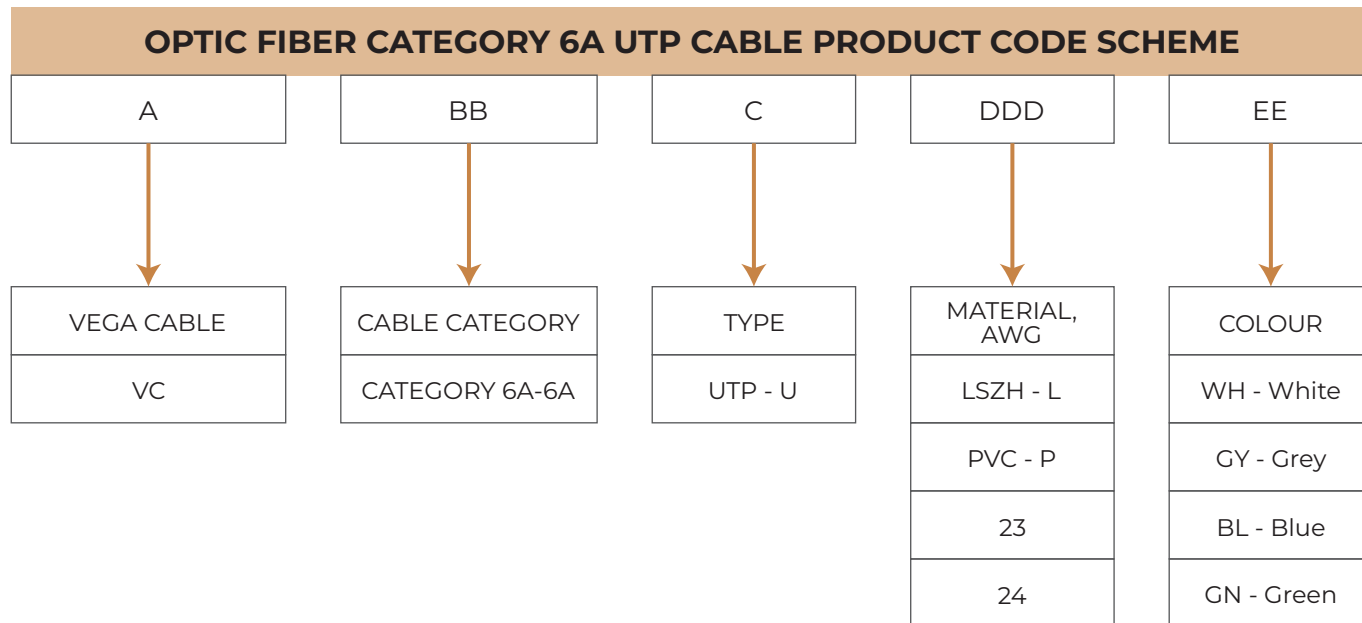
Cross-sectional view of the Category 6A U/UTP cable construction, illustrating the four unshielded twisted pairs, central cross-web separator, and outer jacket:



4. Technical Specifications

Parameter	Specification
Category	CAT 6A, U/UTP (unshielded twisted pair), solid conductor
Number of Pairs	4
Number of Conductors	8
Conductor Material	Bare solid copper
Conductor Gauge	23 AWG
Conductor Outer Diameter	0.565 ± 0.005 mm
Insulation Material	High-Density Polyethylene (HDPE)
Insulation Diameter	1.02 ± 0.03 mm
Separator	PE cross-web (central filler)
Shielding	None (unshielded, U/UTP construction)
Pair Construction	2 insulated conductors twisted together
Outer Jacket Material	FR PVC / LSZH / PE (per part number)
Overall Cable Diameter	6.90 ± 0.30 mm (LSZH) / 7.0 ± 0.50 mm (PVC)
Sheath External Diameter	7.1 ± 0.4 mm
Rated Bandwidth	250 MHz
Transmission Standard	Gigabit and 10 Gigabit Ethernet (10GBASE-T)
Put-Up / Packaging	305 m per pull-box; 500 m per wooden drum
Applicable Standards	ISO/IEC 11801, ANSI/TIA-568-C.2
Certifications	CE, UL, RoHS, ETL

5. Ordering Information



Part Number	Description
VC-6A-S-L23-GY	DHRUVA Connect Category 6A S/FTP solid cable, 23 AWG, LSZH jacket, 305 m, Grey

6. Compliance & Certification

Product design and transmission performance conform to ANSI/TIA-568.2-D and ISO/IEC 11801 category requirements, and the cable is certified to CE, UL, RoHS, and ETL standards, as referenced in the ordering codes above.

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