



CAT 6 UTP NETWORK CABLE

High-Performance Structured Cabling Solution

APPLICATION

CanScorp CAT6 UTP Cable is engineered for high-speed data transmission in enterprise, commercial, and industrial network infrastructures.

- Gigabit Ethernet (1000Base-T)
- High-speed LAN communication
- Digital & Analog Voice
- Video Transmission
- Smart Building & ELV Systems
- Data Centers & Structured Cabling
- Performance verified up to 600 MHz bandwidth
- Exceeds ANSI/TIA-568-C.2 Category 6 & ISO/IEC 11801 Class E standards
- Approvals: CE Listed | RoHS Compliant

CONSTRUCTION

Conductor: **23 AWG Solid Bare Copper (4 Pair)**

Insulation: **High Density Polyethylene (HDPE)**

Pair Structure: **2 insulated conductors twisted together**

Separator: **Cross Filler for reduced Crosstalk**

Rip Cord: **Included**

Outer Sheath: **FR-PVC (Flame Retardant)**

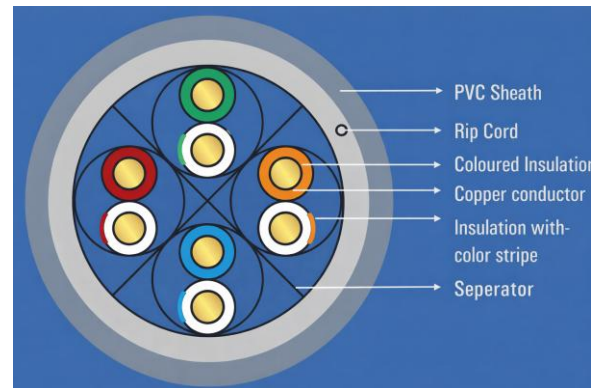
Insulation Thickness: **0.2mm nominal**

Cable Diameter: **6.1 mm nominal**

Cable Weight: **~13.5 Kg / 305m Box**

Printing: **Sequential Meter Length Marking**

CAT 6 UTP CABLES



ELECTRICAL PROPERTIES

Characteristic Impedance: **100 ± 15 Ω**

Conductor Resistance: **≤ 9.38 Ω / 100m**

Insulation Resistance: **≥ 100 MΩ**

Mutual Capacitance: **≤ 5.6 nF / 100m**

Capacitance Unbalance: **330 pF / 100m**

Resistance Unbalance: **≤ 5% Max**

Delay Skew: **≤ 45 ns**

NVP: **69%**

Operating Voltage: **72V**

Dielectric Strength: **1.0 KV DC / 0.75 KV AC (1 min)**

COLOR CODE

- 1-2: White-Orange / Orange
- 3-6: White-Green / Green
- 4-5: White-Blue / Blue
- 7-8: White-Brown / Brown

MECHANICAL PROPERTIES

Bending Radius: **< 25.4mm at -20°C ± 1°C**

Pulling Force: **11.5 Kg**

Operating Temperature Range: **-20°C to +70°C**

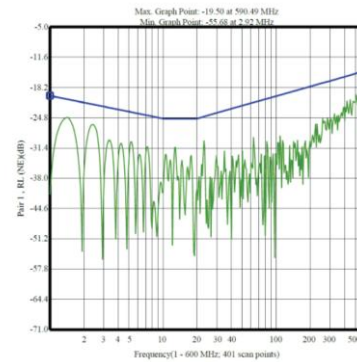
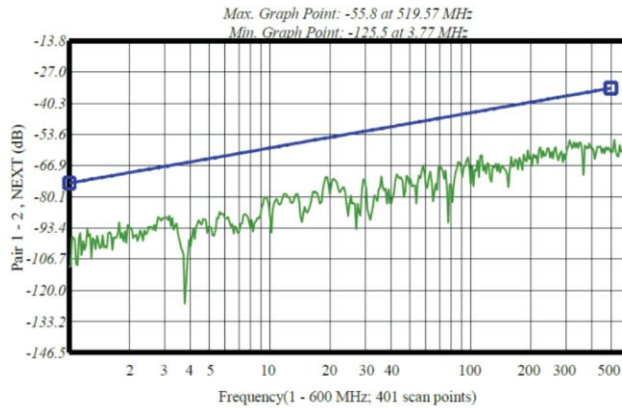
Storage Temperature Range: **0°C to +50°C**

CONNECTION SYSTEM

Compatible with all common systems according to TIA/EIA 568-C.2 and ISO/IEC 11801 Class E

TRANSMISSION CHARACTERISTICS PER 100M

Frequency (MHz)	Insertion Loss (dB/100m)	RL (dB)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB)	PSELFEXT (dB)	ACR (dB)	PSACR (dB)
1	2	20	74.3	72.3	67.8	64.8	72.3	70.3
4	3.8	23	65.3	63.3	55.8	52.8	61.5	59.5
8	5.3	24.5	60.8	58.8	49.7	46.7	55.5	53.5
10	6	25	59.3	57.3	47.8	44.8	53.3	51.3
16	7.6	25	56.2	54.2	43.7	40.7	48.6	46.6
20	8.5	25	54.8	52.8	41.8	38.8	46.3	44.3
25	9.5	24.3	53.3	51.3	39.8	36.8	43.8	41.8
31.25	10.7	23.6	51.9	49.9	37.9	34.9	41.2	39.2
62.5	15.4	21.5	47.4	45.4	31.9	28.9	32	30
100	19.8	20.1	44.3	42.3	27.8	24.8	24.5	22.5
200	29	18	39.8	37.8	21.8	18.8	10.8	8.8
250	32.8	17.3	38.3	36.3	19.8	16.8	5.5	3.5
500	45.3	15.2	33.8	31.8	13.8	10.8	4.5	2.8
600	51	14.5	31.2	29.9	11.8	8.6	3.5	2.1



ORDERING INFORMATION

Part Code	Description
VNT-C6UGRFP-305	CAT6 UTP 23AWG Solid: 305M

PACKING

Reels of guaranteed 305m Length

Canscorp Engineers Private Limited

Shop no. 5, Adinath Alpine Building, Plot no. 28 A, Sector-25,
Khandeshhwar, Panvel, Navi Mumbai, Maharashtra 410209
Specifications are subject to change without notice.

Canscorp is a registered trademark of Canscorp Engineers Private Limited.

All other trademarks belong to their respective owners.

©2026 Canscorp Engineers Private Limited. All rights reserved. Release 01 (February 2026)