

**DIGISOL™****CAT6**

STRUCTURED CABLING SYSTEMS

DIGISOL Solid Cable, Cat6 UTP, 4 Pair, 23AWG, Grey, 305m



Introduction:-

DIGISOL Cat6 4 Pair UTP Cable has been designed for horizontal cabling networks for transmission of high speed data, digital and analog, voice and video signals over LANs. Supports gigabit ethernet (1000 Base-T) standard suitable for noisy environments, high EMI interference surroundings and complies to the requirement of ANSI/TIA-568-C.2 and ISO/IEC 11801. Performance verified upto 250MHz.

Key Features:-

- Better cable material properties and design
- Performance verified upto 250 MHz.
- Available in LSZH jacket sheath
- Packaged in an easy-to-pull box for easier installation (305m length)

Technical Specifications:-

Construction Properties:-

Conductor	: 23 AWG, Solid bare copper
Pairs	: 4 Pair twisted wires
Type	: U/UP CM rated
Insulation Material	: High density polyethylene (HDPE)
Insulation Diameter	: 0.89 ± 0.01 mm
Insulation Nominal Thickness	: 0.2 mm
Central Member	: PE cross separator

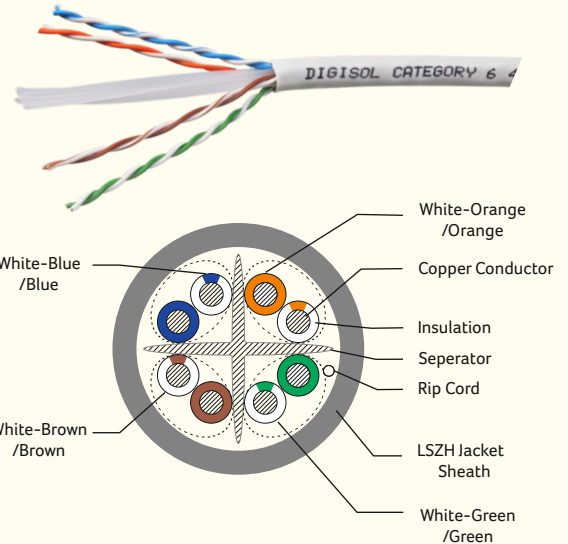
Separator Dimension/Thickness	: 4.3 mm / 0.4 mm
Separator Material	: Polyolefin / Polyethylene
Jacket Sheath	: LSZH
Jacket Average Thickness	: 0.5 ± 0.01 mm
Jacket Diameter	: 5.6 ± 0.2 mm
Rip Cord	: 1 no
Jacket Colour	: Grey

Mechanical Properties:-

Maximum Tensile Strength of Jacket (N/mm ²)	: 13.1
Pulling Force	: 11.5 Kg (25.35 lbs)
Bending radius	: $< 4 \times$ Cable Diameter at $-20^{\circ}\text{C} \pm 1^{\circ}\text{C}$

Environmental Properties:-

Operating Temperature	: -20°C to $+70^{\circ}\text{C}$
Installation Temperature	: -20°C to $+70^{\circ}\text{C}$



Electrical Properties:-

Conductor Resistance	: $\leq 9.38 \Omega/100\text{m}$ Max.
Mutual Capacitance	: $< 5.6 \text{ nF}/100\text{m}$ Max
Resistance Unbalance	: 5% Max
Capacitance Unbalance	: Max. 330 pF/100m
Dielectric Strength	: 2.5 KVDC for 2 seconds
Delay Skew	: $< 45\text{ns}$
Impedance	: $100 \pm 15 \Omega$ @ 100 MHz
Current Rating	: 1.5 A Max.
Operating Voltage	: 72 V

Color Code:-

Pair Number	: Color
1 - 2	: White-Orange Stripe and Orange
3 - 6	: White-Green Stripe and Green
4 - 5	: White-Blue Stripe and Blue
7 - 8	: White-Brown Stripe and Brown

Standards:-

Comply to ANSI/TIA-568-C.2
ISO/IEC 11801
RoHS Compliant

Transmission Performance Parameters:- @ 250 MHz

Frequency MHz	Insertion Loss (dB/100m)	RL (dB)	NEXT (dB)	PSNEXT (dB)	ACRF (ELFEXT) (dB)	PSACRF (PSELFEXT) (dB)	ACR (dB)	PSACR (dB)
250	32.8	17.3	38.3	36.3	19.8	16.8	5.5	3.5

Ordering Information:-

Part Codes	Description
DGC-SC6U4L-3GB	DIGISOL Solid Cable, Cat6 UTP, 4 Pair, 23AWG, LSZH, Grey, 305m

