



# Cat6 24AWG UTP Cable

### **INTRODUCTION**

D-Link solid cables are the best twisted-pair cables in the market for transmitting data over local area Networks (LANs). These cables exceed performance requirements specified by the TIA/EIA-568C.2 and IEC 60603-7-4 standards.

As streaming video and multimedia over LAN are gaining popularity, users demand faster data transmission and reduced waiting time. D-Link cables are ideal for simple, cost-effective and high-speed transmission performance. They support a higher signal-to-noise ratio, providing better reliability for current applications and higher data rates for future applications.

#### CAT6 24AWG UTP CABLE

CAT6 cables reduce crosstalk and system noise. The superior insulation around the 24 AWG copper wires attribute to the increased performance. They can transmit data at 1000 Mbps (~1 Gigabit per second) with a frequency of 250 MHz and suitable for 10BASE-T, 100BASE-TX Fast Ethernet and 1000BASE-T / 1000BASE-TX (Gigabit Ethernet).

## **TECHNICAL DETAILS**

- Mutual Capacitance: 5.6nF/100m nominal
- Characteristic Impedance: 100 $\Omega\pm15\%$
- Nominal Velocity of Propagation: 69%
- Characteristic Impedance: 100+15 $\Omega$
- Conductor Resistance: < 9.38Ω/100m
- Mutual Capacitance: < 5.6nF/100m
- Resistance Unbalance: 5% Max
- Capacitance Unbalance: 330pF/100m
- Delay Skew: < 45nS
- Bending Radius: < 4 X Cable Diameter at -20°C ± 1°C
- Pulling Force: 11.5Kg
- Temperature Range: -20° to +70°C

#### **SPECIFICATIONS**

- 4 Pairs Unshielded Twisted Pair (UTP) Cable
- Conductor Metal: Solid Bare Copper
- Color Code: Gray
- Conductor Diameter : 0.520mm Nominal, 24 AWG
- Insulation Diameter: 0.940mm Nominal, Insulation Material: HD-PE
- Jacket Material: PVC UL94V-0
- Cable Diameter: 5.7mm
- PE Central Cross separator

#### 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	2.0	20.0	74.3	72.3	67.8	64.8	72.3	70.3
4	3.8	23.0	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	6.0	25.0	59.3	57.3	47.8	44.8	53.3	51.3
16	7.6	25.0	56.2	54.2	43.7	40.7	48.6	46.6
20	8.5	25.0	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	32.0	30.0
100	19.8	20.1	44.3	42.3	27.8	24.8	24.5	22.5
200	29.0	18.0	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

Product No.	Description	Color
NCB-C6UGRYR-305-24	Cat6 UTP 24AWG Solid Cable - 305M/Roll	Gray

#### **APPROVAL / CERTIFICATION**

- Verified compliant with TIA/EIA-568C.2 standards by ETL
- CUL listed
- RoHs

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