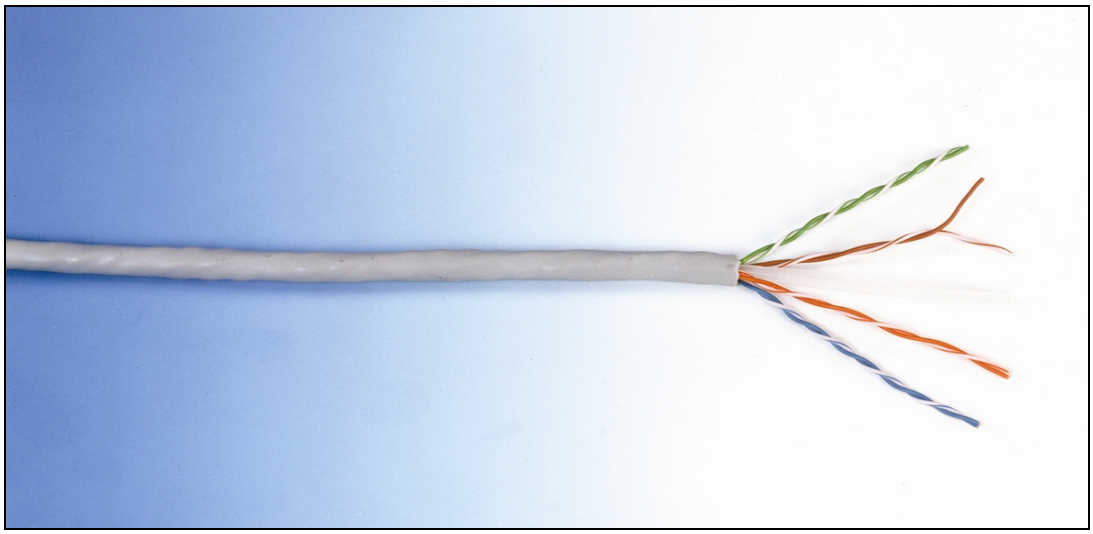
CLASSix UTP Horizontal Cable

Features



- 100 ohm, UTP horizontal cable
- Four twisted pairs
- High performance, designed for ATM 622 Mbps and Gigabit Ethernet 1000 Mbps applications
- Specified up to 250 MHz
- Conforms to ANSI/TIA/EIA-568-B.2-1, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 6/Class E
- Halogen-free, flame-retardant (HFFR) or PVC jacket
- Available in easy-pull, ready-to-use box

CLASSix UTP Horizontal Cable

Features

The CLASSix UTP Horizontal Cable is a 100-ohm cable, with two options: halogen-free, flame-retardant (HFFR) or PVC jacket and four twisted pairs for indoor installations. The cable conforms to ANSI/TIA/EIA-568-B.2-1, ISO/IEC 11801 2nd edition (2002) and CENELEC EN50173 (2002) for Category 6/Class E, and is designed for high-speed applications such as ATM 622 Mbps, Gigabit Ethernet 1000 Mbps and future high-speed applications.

CLASSix UTP Horizontal Cable

Specifications

Construction

- **Basic Wires**
  Conductor: eight wires, solid bare copper 23 AWG
  Insulation: polyolefin, 1.0mm OD.

- **Pair Construction**
  Four pairs cabled together, over a precision cross-shaped pair organizer.

- **Pair Color Codes (2 wires/pair)**
  Blue/white-blue, orange/white-orange, green/white-green, brown/white-brown.

- **Jacket Thickness**
  0.7 ± 0.1mm.

- **Overall Diameter**
  6.7mm nominal.

- **Outer Sheath**
  HFFR
  Halogen-free, flame retardant (HFFR) compound, colored light gray RAL 7032 with black printing.
  PVC
  SR PVC compound, colored light gray RAL 7035, with black printing.

- **Printing**
  HFFR
  RIT R3729070 CLASSix UTP DATA CABLE 100-ohm CATEGORY 6....ANSI/TIA/EIA-568-B.2-1 ISO/IEC 11801 2nd EDITION (2002)....4X2X23AWG HFFR { } METER {Batch Number}.
  PVC
  RIT R3729170 CLASSix UTP DATA CABLE 100-ohm CATEGORY 6....ANSI/TIA/EIA-568-B.2-1 ISO/IEC 11801 2nd EDITION (2002).... 4X2X23AWG { } METER {Batch Number}

CLASSix UTP Horizontal Cable

Specifications

Electrical

- **DC Resistance**
  Max. 73.0 W/km max. at 20°C.
- **Resistance Unbalance**
  3% max. at 20°C.
- **Mutual Capacitance**
  41 pF/m at 1 KHz.
- **Capacitance Unbalance**
  1000 pF/km max. at 1 KHz.
- **Impedance**
  100 ± 15 ohm at 1 to 100 MHz.
- **Voltage Rating**
  230 Vrms.
- **Dielectric Strength**
  700 VAC/one minute.
- **Insulation Resistance**
  152 Mohm*km min @ 500 Vdc 20°C.
- **Velocity of Propagation**
  68% nominal.
- **Propagation Delay**
  4.2 nS/m max @ 1 MHz.
  4.1 nS/m max @ 10 MHz.
  4.1 nS/m max @ 100-300 MHz.
- **Propagation Delay Skew**
  20 nS/100 m max @ 1-250 MHz.

CLASSix UTP Horizontal Cable

Specifications

SMART CLASSix WARRANTY

6

Transmission

Frequency MHz	Attenuation dB/100m	NEXT dB (100m)	PSNEXT dB (100m)	ELFEXT dB (100m)	PSELFEXT dB (100m)	Return Loss (SRL)
1	2.0	79.3	77.3	67.8	64.8	20.0
4	3.7	70.2	68.2	55.7	52.7	23.0
8	5.2	65.8	63.8	49.8	46.8	24.4
10	5.7	64.3	62.3	47.8	44.8	25.0
16	7.3	61.2	59.2	43.7	40.7	25.0
20	8.1	59.8	57.8	41.7	38.7	25.0
25	9.6	57.3	55.3	39.8	36.9	24.5
31.25	10.2	56.8	54.8	37.9	34.9	23.6
62.5	14.7	52.3	50.3	31.8	28.8	21.5
100	19.0	49.3	47.3	27.8	24.8	20.1
125	21.4	47.8	45.8	25.8	22.8	19.4
155	25.3	45.8	43.5	23.2	19.7	19.2
175	27.1	45.3	43.0	22.1	19.3	18.5
200	27.7	44.8	42.8	21.7	18.7	18.0
225	31.0	43.9	42.3	20.3	17.4	17.9
250	31.4	43.3	41.3	19.8	16.8	17.3

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Specifications

General

- **Installation Temperature**
  -5° to 50°C (32° to 122°F)
- **Operating Temperature**
  -20° to 60°C (-4° to 140°F)
- **Bending Radius (min.)**
  60mm during installation
  30mm during operation
- **Flammability Test**
  IEC 332-1 / UL 1581 VW-1
- **Weight**
  HFFR
  44.0 kg/km, nominal
- **PVC**
  47.0 kg/km, nominal
- **Pulling Strength**
  92 N max.
- **Breaking Strength**
  400 N min.