

Category 6 Cabling System



Key Features

- High performance Category 6 cable to transmit full broadband and baseband video signals
- Meets TIA-568.2-D and IEEE802.3 to support maximum 1Gbit TX transmission and a bandwidth up to 250MHz
- Performance guaranteed max. 4 connections in any length channel configuration up to 100m
- Optimized solution for high density data centers and IBS buildings with thinner cable and a whole range of components

Guaranteed Channel Performances

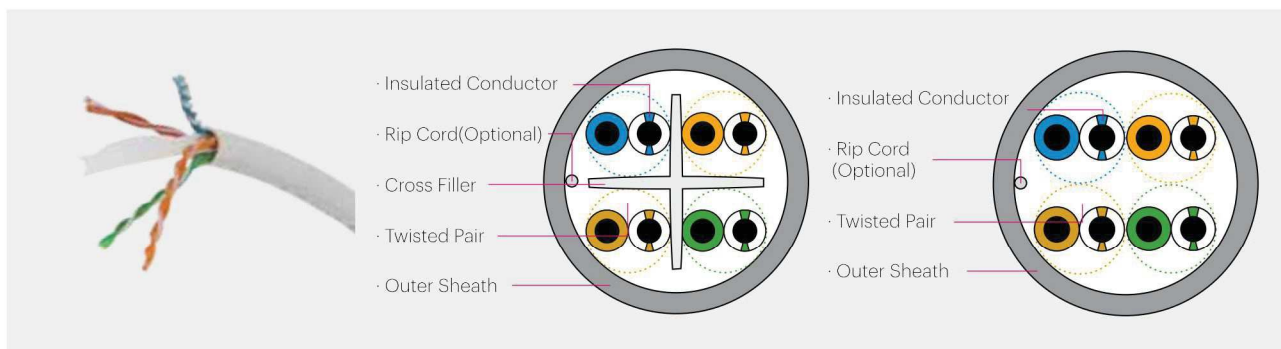
Frequency (MHz)	Attenuation (dB / 100m)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB / 100m)	PSELFEXT (dB / 100m)	Return Loss (dB)
1.00	2.1	65.0	62.0	63.3	60.3	19.0
4.00	4.0	63.0	60.5	51.2	48.2	19.0
8.00	5.7	58.2	55.6	45.2	42.2	19.0
10.00	6.3	56.6	54.0	43.3	40.3	19.0
16.00	8.0	53.2	50.6	39.2	36.2	18.0
20.00	9.0	51.6	49.0	37.2	34.2	17.5
25.00	10.1	50.0	47.3	35.3	32.3	17.0
31.25	11.4	48.4	45.7	33.4	30.4	16.5
62.50	16.5	43.4	40.6	27.3	24.3	14.0
100.00	21.3	39.9	37.1	23.3	20.3	12.0
200.00	31.5	34.8	31.9	17.2	14.2	9.0
250.00	35.9	33.1	30.2	15.3	12.3	8.0

* The figures larger than 67dB for PSANEXT and PSAELFEXT are information only.

Typical Channel Performance

Attenuation (dB / 100m)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB / 100m)	PSELFEXT (dB / 100m)	Return Loss (dB)
-10%	+8	+8	+10	+10	+5

Category 6 U/UTP Cable



Descriptions

- 4 pair twisted cable
- ETL Verified & UL Listed
- Transmits full broadband and baseband video signals
- Available with higher flame retardant grade(Plenum Cable)
- Electrical performance according to TIA-568.2-D
- Packaged in a Box (Reelex or RIB)
- RoHS compliant
- Applicable for LS 25-Year Extended Product Warranty
- Meets requirements of CPR : Eca grade for PVC jacket / Dca grade for LSZH jacket
- UV Resistance to UL 1581 and -40°C Cold Resistance to GR-3164 (Optional)

Applications

- Horizontal Distribution & Backbone Cabling
- 4/16 Mbps Token Ring(IEEE 802.5)
- 10/100/1000 BASE-T(IEEE 802.3)
- 155 Mbps ATM
- 100Mbps TP-PMD
- ISDN, ADSL
- ATM LAN 1.2G
- PoE & PoE+ (IEEE 802.3af Type 1(15.4W), IEEE 802.3at Type 2(30W))

Technical Details

Item	Unit	Non-Plenum	Plenum
Conductor DC Resistance	Ohms/100 m	Max. 9.38	Max. 9.38
Resistance Unbalance	%	5	5
Mutual Capacitance	nF/100 m	5.6	5.6
Capacitance Unbalance	pF/100 m	330	330
Characteristic Impedance	Ohms	100 ± 15%	100 ± 15%
Propagation Delay	ns/100 m	536 @ 250MHz	536 @ 250MHz
Delay Skew	ns	45	45
Nominal Velocity of Propagation	%	67	69
Operating Temperature	°C / °F	-20~60 / -4~140 (-40~60 / -40~140 in case of Cold Resistance)	-20 ~ 60 / -4 ~ 140
Storage Temperature	°C / °F	-20 ~ 80 / -4 ~ 176	-20 ~ 80 / -4 ~ 176
Bending Radius	-	4 x Cable Diameter	4 x Cable Diameter
Packaging Type	1000ft (305m)	Reelex / Reel In a Box/Reel	Reelex / Reel In a Box/Reel
Packaging Weight	lb/kft (kg/km)	24(36), Cross filler	26(39), Cross filler
Conductor Diameter / Material	-	23~24 AWG, Solid Copper	23~24 AWG, Solid Copper
Insulation Diameter / Material	Inch (mm)	0.037 (0.95), HDPE	0.037 (0.95), FEP
Outer Diameter / Material	Inch (mm)	0.236 (6.0), PVC or LSZH - Cross filler 0.213(5.4), PVC or LSZH - Non-filler	0.228 (5.8), LS-PVC - Cross filler 0.209(5.3), LS-PVC - Non-filler
Safety Standard, Performance Standard	UL444 / CMX-UL1581, IEC 332-1 / CM-UL1685, IEC 332-3 / CMR-UL1666 / CMP-NFPA262 / LSZH-IEC 61034, IEC 60754		
Approvals Performance	TIA-568.2-D, ISO/IEC 11801 "Performance specifications for 4pairs 100 ohm Category 6 Cabling"		