

Category 6 UTP Plenum Cable 23AWG

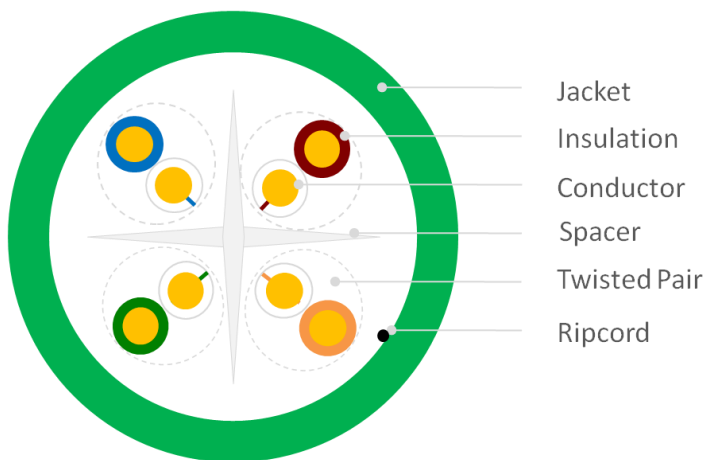
Category 6 Unshielded Twisted Pair Plenum Cable, UL Listed, RoHS Compliant

Infinique's Category 6 UTP Plenum cable can be used to design up to 100 meter channel links with cables and patch cord lengths, offering maximum flexibility, minimizing excess cable and patch cord lengths. It is a CMP cable (Communications Multipurpose Cable, Plenum) complies with the most demanding of UL fire protection standard UL910. Designed to restrict flame propagation to no more than five feet and to limit the amount of smoke emitted during a fire, these cables are deployed in plenum spaces such as ventilation ducts, under raised floors, etc. As smoke and fire can spread quickly through plenum spaces and cause damage to people and property, plenum cables are essential to prevent the fire from spreading out in these spaces.

It provides considerable margin above all electrical transmission performance requirements complies with ANSI/TIA-568-C.2 and ISO/IEC 11801. The Category 6 UTP Plenum Cable is UL listed.

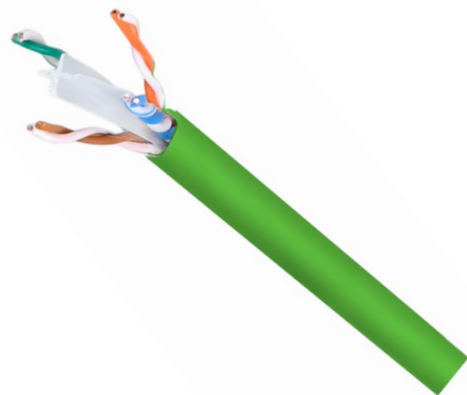
With guaranteed significant channel margin over the entire frequency range, from 1 to 550 MHz for the entire channel link, Infinique Cat.6 UTP Plenum cable can transmit data, voice, video and PoE Power over Ethernet standard (POE 802.3af) allowing data and power connection for POE equipments. Infinique Category 6 UTP Plenum cable is backwards compatible and provides flexibility to protect network investments well into the future. It is certified to the ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E standards and supports applications such as, Ethernet 10BASE-T, 100BASE-T (Fast.Ethernet), 1000BASE-T (Gigabit Ethernet as specified in 10GBASE-T standards), 155 Mb/s ATM, 622 Mb/s ATM, 1.2 Gb/s ATM and Token Ring 4/16. Collectively with other Infinique's Category 6 products, Cat.6 UTP Plenum Cable is the right solution for voice, data and video transmission needs. The Category 6 UTP Cable is offered in CMX and LSOH jackets in 1640 ft (500 m) reels to accommodate various installation requirements.

CABLE CONSTRUCTION



Features and Benefits

- Certification**
 UL Listed for most demanding fire protection standard UL910. Complies with performance standards as per ANSI/TIA-568-C.2 and ISO/IEC 11801
- Reliable Performance**
 Channel performance in a 4-connector configuration up to 100 meters and meets ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E standards at swept frequencies up to 250MHz
- Higher Bandwidth**
 100 Ohm 4-pair construction with center spacer provides the extra margin of performance required for high bandwidth applications
- Performance Warranty**
 Qualifies for the Infinique's 25 Years System Performance Link Warranty



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ELECTRICAL SPECIFICATIONS

DC Resistance	<9.5Ω /100m
DC Resistance Unbalance (%)	5.0
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedence	1 – 100MHz: 100 Ω ± 15%; 1 – 350MHz: 100 Ω ± 18%; 1 – 500MHz: 100 Ω ± 25%,
Insulation Resistance	> 5000 MΩ x km
Propagation Speed	10MHz (NVP*c): 0.79c
NVP Value	70%
Signal propagation Delay	>10MHz: 4,2ns/m
Delay Skew	<45ns/100m

MATERIAL SPECIFICATIONS

Conductor	Solid Bare Copper 23 AWG, Ø 0.57±0.05mm
Insulation	Material: Fluorinated Ethylene Polymer (FEP); Ø (mm): 0.95±0.05mm; Thickness: 0.387±0.005mm
Cabling	Four Unshielded Twisted Pairs
Pairing	1 - Blue/White-Blue; 2 – Orange/White-Orange; 3 – Green/White-Green; 4 – Brown/White-Brown
Spacer	Fluorinated Ethylene Polymer (FEP)
Rip Cord	Nylon Thread
Outer Jacket	CMP PVC Jacket; Diameter: 6.0 ±0.4mm; Thickness: 0.45 ±0.05mm; Green RAL6037
Fire Protection	CMP, Safety Standard: UL 910
Pulling Tension Max	110N (25lbf)
Bend Radius	One Time: 4 x O.D. Installation: 8 x O.D.
Operating Temperature	-20°C to 60°C
Storage Temperature	-20°C to 75°C
Installation Temperature	0°C to 60°C

MECHANICAL PROPERTIES

Test Material CMP PVC	Before Aging Tensile Strength (Mpa) >=13.5 Before Aging Elongation (%) ≥ 150 Aging Period (°C x h x days) 100 x 24h x 7d After Aging Tensile Strength (Mpa) >=12.5 After Aging Elongation (%) ≥ 125 Cold Bend (-20+2°C x 4h) 8 x Cable OD, No Cracks
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TRANSMISSION PERFORMANCE

Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS NEXT (dB)	ELFEXT (dB/100m)	PS ELFEXT (dB/100m)	RL (dB)
1	1.9	74.3	72.3	67.8	64.8	20.0
4	3.7	65.3	63.3	55.8	57.7	23.0
10	5.9	59.3	57.3	47.8	44.8	25.0
16	7.5	56.3	54.3	43.7	40.7	25.0
20	8.4	54.8	52.8	41.8	38.7	25.0
31.25	10.6	51.9	49.9	37.9	34.9	23.6
62.5	15.4	47.4	45.4	31.9	28.8	21.5
100	19.8	44.3	42.3	27.8	24.8	20.1
150	25.1	41.4	39.4	23.9	20.9	18.8
200	29.0	39.8	37.8	21.8	18.7	18.0
250	32.8	38.3	36.3	19.8	16.8	17.3
350*	39.8	36.1	34.1	16.9	13.9	16.3
400*	43.0	35.3	33.7	15.7	12.7	15.9
450*	46.3	34.5	32.6	14.7	11.7	15.5
500*	48.9	33.8	31.8	13.8	10.8	15.2
550*	51.8	33.2	31.2	12.9	9.9	14.9

*Frequency values above industry standards are for information only.

STANDARDS

Meets or Exceeds ANSI/TIA-568-C.2 and ISO/IEC 11801 Class E Channel standards
CMP UL Fire Protection Standard UL910
EN 50173 MICE Environmental Requirements
Flame Retardant as per IEC 60332-1 and EN 50266-2-1
Non Corrosive as per IEC 60754-2 and EN 50267

PACKING

Meter Marking: INFINIQUE CANADA CAT.6 UTP PLENUM 4PR 23 AWG, CMP UL LISTED + ****m +PRODUCTION DATE SN
500m (1640ft), 305m (1000ft), 152m (500ft) packed in reels

ORDERING INFORMATION

Part Number	Description
INC6U4GRP-500	Category 6 UTP Plenum Cable, 23 AWG Cable, CMP, UL Listed, RoHS Compliant, Green, 500m
INC6U4GRP-305	Category 6 UTP Plenum Cable, 23 AWG Cable, CMP, UL Listed, RoHS Compliant, Green, 305m
INC6U4GRP-153	Category 6 UTP Plenum Cable, 23 AWG Cable, CMP, UL Listed, RoHS Compliant, Green, 153m



Infinique, a Canadian company is a manufacturer of high performing end-to-end solutions in copper, fiber and video surveillance systems. For more information visit our website at www.infinique.com or email us at sales@infinique.com.