

# Category 6 UTP Cable

Category 6 Unshielded Twisted Pair Cable, ETL Verified, UL Listed, RoHS Compliant

Infinique's Category 6 UTP cable can be used to design 100 meter channel links as well as shorter channel links with cables and patch cord lengths as short as required, offering maximum flexibility and minimizing excess cable and patch cord lengths which offer cost savings for all applications.

It provides considerable margin above all electrical transmission performance requirements specified in ANSI/TIA-568-C.2 and ISO/IEC 11801 and is ETL verified. Infinique's Category 6 UTP cable provides optimum electrical performance capable of handling critical, high-bandwidth applications. The Category 6 UTP Cable is UL listed and has passed UL 1581 vertical tray flame test.

With guaranteed significant channel margin over the entire frequency range, from 1 to 250 MHz for the entire channel link, Infinique Cat.6 UTP cable can transmit data, voice, video and PoE Power over Ethernet standard (POE 802.3af) allowing data and power connection for POE equipments.

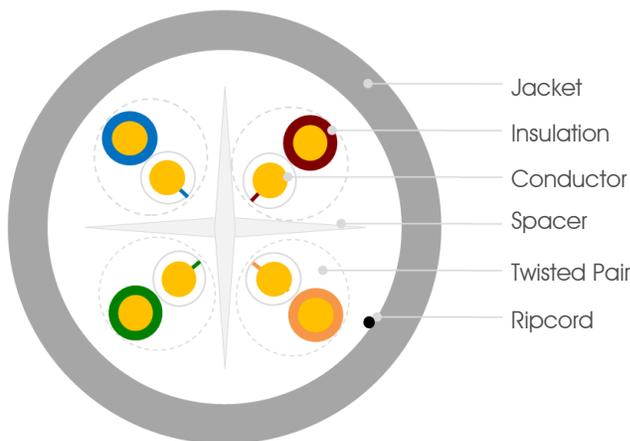
Infinique Category 6 cable is backwards compatible and provides flexibility to protect network investments well into the future. It is certified to the ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E standards and supports applications such as, Ethernet 10BASE-T, 100BASE-T (Fast.Ethernet), 1000BASE-T (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 Cable is the right solution for voice, data and video transmission needs. The Category 6 UTP Cable is offered in LSOH, CMX, CMR, Plenum, PVC and PE jackets in 1640ft (500m) and 1000ft (305m) reels to accommodate various installation requirements.

## Features and Benefits

- Certification**  
 ETL Verified for performance as per ANSI/TIA-568-C.2 and ISO/IEC 11801 standards
- 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

## CABLE CONSTRUCTION



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## ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω /100m
DC Resistance Unbalance	3%
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	<25ns/100m

## MATERIAL SPECIFICATIONS

Conductor	Solid Bare Copper 23 AWG, Ø 0.57mm
Insulation	Material: Halogen Free Foam/Skin F-PE   Ø (mm): 1.35±0.005mm; Thickness: Avg: 0.3875mm   Min: 0.385mm
Cabling	Four Unshielded Twisted Pairs
Pairing	1 - Blue/White-Blue; 2 – Orange/White-Orange; 3 – Green/White-Green; 4 – Brown/White-Brown
Spacer	PE (Polyethylene)
Rip Cord	Nylon Thread
Outer Jacket	Flame Retardant CMX Cable Jacket; Diameter: 7.1 ± 0.2mm   Thickness: Avg-0.65mm, Min- 0.55mm
Fire Protection	CMX, Safety Standard: UL 1581 VW-1   Outdoor: PE Jacket   PVC Jacket   LSOH Jacket
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

## 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

ETL Verified for performance as per ANSI/TIA-568-C.2 and ISO/IEC 11801 Class E Channel standards.  
 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  
 Low Smoke Emission as per IEC 61034 and EN 50268

## PACKING

Meter Marking: INFINIQUE CANADA CAT.6 UTP 4PR 23 AWG ETL VERIFIED TO ANSI/TIA-568-C.2, ISO/IEC 11801, UL LISTED + \*\*\*\*m +PRODUCTION DATE SN  
 500m (1640ft) packed in No-Snag Cable De-reeler Box with Plastic Reinforced Handle Grips

## ORDERING INFORMATION

Part Number	Description
INC6U4GYRC-500	Category 6 UTP Cable, 23 AWG Cable, CMX Jacket, ETL Verified, UL Listed, Gray, 500m
INC6U4GYRL-500	Category 6 UTP Cable, 23 AWG Cable, LSOH Jacket, ETL Verified, Gray, 500m
INC6U4GYM-500	Category 6 UTP Cable, 23 AWG Cable, CMR Jacket, ETL Verified, Gray, 500m
INC6U4BLV-500	Category 6 UTP Cable, 23 AWG Cable, PVC Jacket, ETL Verified, UL Listed, Blue, 500m
INC6U4BKO-500	Category 6 UTP Cable, 23 AWG Cable, Outdoor, PE Jacket, ETL Verified, UL Listed, Black, 500m

Available in 305 and 500 meter reels, replace 500 in Part Number with 305 for 305 meter reels.

Jacket Color, Replace 7-8 digit in part number with Color Code BK: Black, BL: Blue, GR: Green, GY: Gray, YW: Yellow, OR: Orange, IB: Ice Blue, OR: Orange, PR: Purple, RD:



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