

# Category 6 UTP 24 AWG Cable

Category 6 Unshielded Twisted Pair Cable, CMX Jacket

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.

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.

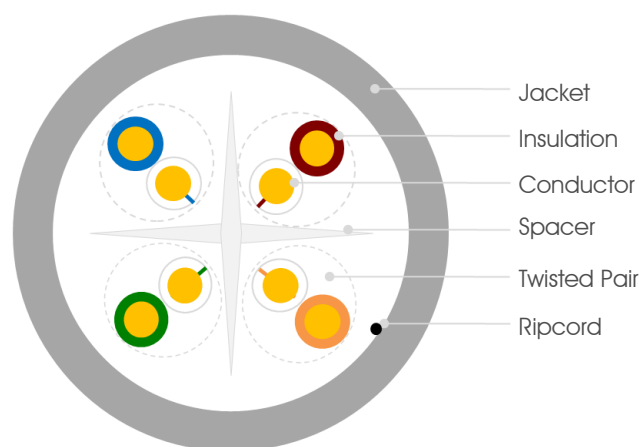
Infinique Category 6 cable is backwards compatible and provides flexibility to protect network investments well into the future. It is certified to the ANSI/TIA-568-C.2 Category 6 and ISO 11801 Class E standards and supports applications such as, Ethernet 10BASE-T, 100BASE-T (Fast.Ethernet), 1000BASE-T (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 24 AWG UTP Cable is offered in CMX jacket in 500 m (1640 ft) 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 24 AWG
Insulation	Material: 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	CMX Cable Jacket; Diameter: 7.1 ± 0.2mm   Thickness: Avg-0.65mm, Min- 0.55mm
Fire Protection	CMX, Safety Standard: UL 1581 VW-1
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
	39.8	36.1	34.1	16.9	13.9	16.3

\*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.

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 4PR 24 AWG ETL VERIFIED TO ANSI/TIA-568-C.2, ISO/IEC 11801+ \*\*\*\*m +PRODUCTION DATE SN

500m (1640ft) packed in No-Snag Cable Reel

## ORDERING INFORMATION

Part Number	Description
INC6U4GYRC-500	Infinique Cable Cat.6 UTP 24 AWG Solid Copper, ETL Verified, CMX, 500m, Gray
INC6U4GYRC-305	Infinique Cable Cat.6 UTP 24 AWG Solid Copper, ETL Verified, CMX, 305m, Gray
INC6U4BLRC-500	Infinique Cable Cat.6 UTP 24 AWG Solid Copper, ETL Verified, CMX, 500m, Blue
INC6U4BLRC-305	Infinique Cable Cat.6 UTP 24 AWG Solid Copper, ETL Verified, CMX, 305m, Blue

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:



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](http://www.infinique.com) or email us at [sales@infinique.com](mailto:sales@infinique.com).