infinique™

Category 6 UTP Cable 23 AWG

Category 6 Unshielded Twisted Pair Cable, ETL Verified, PVC, 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 ETL Verified for performance.

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.

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**
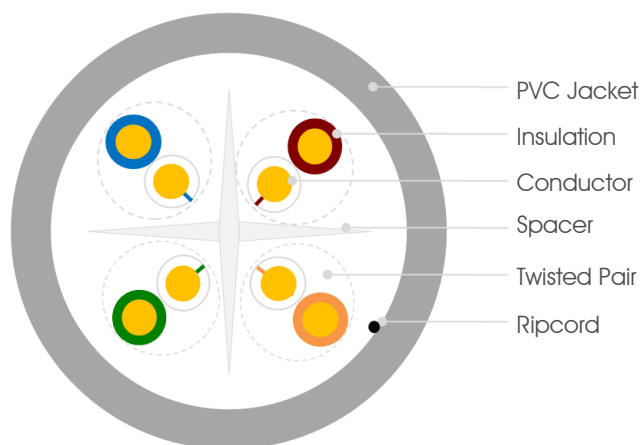 Qualifies for the Infinique's 25 Years System Performance Link Warranty

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 PVC jackets in 1640ft (500m) and 1000ft (305m) reels to accommodate various installation requirements.

CABLE CONSTRUCTION

- PVC Jacket
- Insulation
- Conductor
- Spacer
- Twisted Pair
- Ripcord

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ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω /100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impendence	1 – 250MHz: 100 Ω ± 15
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	1 – 250MHz: <45ns/100m

MATERIAL SPECIFICATIONS

Conductor	Solid Bare Copper 23 AWG
Insulation	Material: HDPE | Ø (mm): 0.98±0.05mm
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	PVC (RoHS Compliant); Nominal Diameter: 5.8mm | Diameter Tolerance: ± 0.4mm | Thickness: 0.50mm ± 0.05mm
Pulling Tension Max	110N (25lbf)
Bend Radius	One Time: 4 x O.D. Installation: 8 x O.D.
Operating Temperature	-20℃ to 60℃
Storage Temperature	-20℃ to 75℃
Installation Temperature	0℃ to 60℃

TRANSMISSION PERFORMANCE

Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS NEXT (dB)	ELFEXT (dB/100m)	PS ELFEXT (dB/100m)	RL (dB)
1	2.03	74.3	72.3	67.8	64.8	20.0
4	3.78	65.3	63.3	55.8	52.8	23.0
8	5.32	60.8	58.8	49.7	46.7	24.5
10	5.95	59.3	57.3	47.8	44.8	25.0
16	7.55	56.2	54.2	43.7	40.7	25.0
20	8.47	54.8	52.8	41.8	38.8	25.0
25	9.51	53.3	51.3	39.8	36.8	24.3
31.25	10.67	51.9	49.9	37.9	34.9	23.6
62.5	15.38	47.7	45.4	31.9	28.9	21.5
100	19.80	44.3	42.3	27.8	24.8	20.1
200	28.98	39.8	37.8	21.8	18.8	18.0
250	32.85	38.3	36.3	19.8	16.8	17.3

STANDARDS

ETL Verified for performance as per ANSI/TIA-568-D.2 and ISO/IEC 11801 Class E Channel standards
EN 50173 MICE Environmental Requirements
IEEE PoE Standards 802.3bt, Type1, Type2, Type3, Type4
Non Corrosive as per IEC 60754-2 and EN 50267
RoHS Compliant

PACKING

Meter Marking: INFINIQUE CANADA CAT.6 UTP 4PR 23 AWG ETL VERIFIED TO ANSI/TIA-568-C.2, ISO/IEC 11801, PVC + ****m +PRODUCTION DATE SN

305m (1000ft) packed in No-Snag Cable De-reeler Box with Plastic Reinforced Handle Grips

ORDERING INFORMATION

Part Number	Description
INC6U4GYV-305	Infinique Cable Cat.6 UTP 23 AWG Solid Copper, ETL Verified, PVC, Gray, 305m
INC6U4GYV-500	Infinique Cable Cat.6 UTP 23 AWG Solid Copper, ETL Verified, PVC, Gray, 500m
INC6U4BLV-305	Infinique Cable Cat.6 UTP 23 AWG Solid Copper, ETL Verified, PVC, Blue, 305m
INC6U4BLV-500	Infinique Cable Cat.6 UTP 23 AWG Solid Copper, ETL Verified, PVC, Blue, 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: Red, WT: White

I Infinique™ 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.

Product specification, design and availability subject to change without prior notice.

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