

# Category 6A UTP Outdoor Cable

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

Infinique's Category 6A (Augmented Category) UTP UL listed cable has been designed for high network performance of up to 550 MHz over distances of up to 100 meters. It provides considerable margin above all electrical transmission performance requirements specified in ISO/IEC 11801 Class EA and ANSI/TIA-568C.2 standards and supports 10 Gigabit Ethernet (10GBASE-T). The cable construction has tighter twists and in-built longitudinal separators to reduce alien crosstalk (AXT) coupling between adjacent cables.

Infinique's Category 6A UTP Cable is also available with a LSOH jacket with flame retardant standards as defined in IEC 60332-1, and smoke emission standards IEC61034. These cable are supplied on 305 or 500 meter reels with sequential meter marking. Infinique Category 6A UTP Cable is backwards compatible and provides flexibility to protect network investments well into the future.

# 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 EA standards at swept frequencies up to 500MHz

### Higher Bandwidth

100 Ohm 4-pair construction with center spacer provides the extra margin of performance required for high bandwidth applications

### Performance Warranty

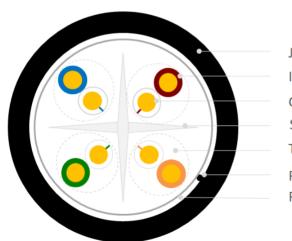
Qualifies for the Infinique's 25 Years System Performance Link Warranty

With guaranteed significant channel margin over the entire frequency range, from 1 to 500 MHz for the entire channel link, Infinique Cat.6A UTP cable can transmit data, voice, video and PoE Power over Ethernet standard (POE 802.3af) allowing data and power connection for POE equipments.

It is certified to the ANSI/TIA-568-C.2 Category 6A and ISO 11801 Class EA 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 6A products, Cat.6A UTP Cable is the right solution for voice, data and video transmission needs. The Category 6A UTP OSP Cable comes in PE jackets in 1640ft (500m) and 1000ft (305m) drums to accommodate various installation requirements.

# **CABLE CONSTRUCTION**



Jacket
Insulation
Conductor
Spacer
Twisted Pair
Ripcord
PET Tape











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### **ELECTRICAL SPECIFICATIONS**

DC Resistance < 9.50 /100m DC Resistance Unbalance Max 5% Mutual Capacitance 5.6 nF/100m <330 pF/100m Capacitance Unbalance

Characteristic Impendence 1 - 100 MHz;  $100 \Omega \pm 15\%$ ; 1 - 350 MHz;  $100 \Omega \pm 18\%$ ; 1 - 500 MHz;  $100 \Omega \pm 25\%$ .

Insulation Resistance > 5000 MO x km10MHz (NVP\*c): 0,79c Propagation Speed NVP Value (Nominal Velocity of Propagation) 70% Signal Propagation Delay >10MHz: 4,2ns/m Delay Skew <45ns/100m

MATERIAL SPECIFICATIONS

Insulation

Solid Bare Copper 23 AWG | Ø (mm): 0.57mm Conductor

Material: Halogen Free Foam/Skin F-PE  $\mid$  Ø (mm): 1.03 $\pm$ 0.005mm; Thickness: Avg: 0.65 $\pm$ 0.05mm

Cabling Four Unshielded Twisted Pairs

Pairing 1 - Blue/White-Blue; 2 - Orange/White-Orange; 3 - Green/White-Green; 4 - Brown/White-Brown

PE (Polvethylene) Spacer Nylon Thread Rip Cord Shield PET Tape

Outer Jacket LDPE Cable Jacket (Complies RoHS) | Diameter: 7.1  $\pm$  0.2mm | Thickness: Avg-0.65mm, Min- 0.55mm

Fire Protection CMX, Safety Standard: UL 1581 VW-1

Pulling Tension Max 110N (25lbf)

One Time: 4 x O.D. Installation: 8 x O.D. Bend Radius

Operating Temperature -20°C ~ 60°C -20°C ~ 75°C Storage Temperature Installation Temperature 0°C ~ 60°C

# TRANSMISSION PERFORMANCE

Frequency	Attenuation	NEXT	PS NEXT	ELFEXT	PS ELFEXT	RL
(MHz)	(dB/100m)	(dB)	(dB)	(dB/100m)	(dB/100m)	(dB)
1	2.1	74.3	72.3	67.8	64.8	20.0
4.0	3.8	65.3	63.3	55.8	52.8	23.0
8.0	5.3	60.8	48.8	49.7	46.7	24.5
10.0	5.9	59.3	57.3	47.8	44.8	25.0
16.0	7.5	56.2	54.2	43.7	40.7	25.0
20.0	8.4	54.8	52.8	41.8	38.8	25.0
25.0	9.4	53.3	41.3	39.8	36.8	24.3
31.25	10.5	51.9	49.9	37.9	34.9	23.6
62.5	15.0	47.4	45.4	31.9	28.9	21.5
100	19.1	44.3	42.3	27.8	24.8	20.1
200	27.6	39.8	37.8	21.8	18.8	18.0
250	31.1	38.3	36.3	19.8	16.8	17.3
300	34.3	37.1	35.1	18.3	15.3	16.8
500	45.3	33.8	31.8	13.8	10.8	15.2
*550	44.7	33.2	31.2	13.0	10.0	14.9

<sup>\*</sup>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 EA 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.6A 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 Drum

# **ORDERING INFORMATION**

Part Number	Description		
INC6AU4BKO-500	Category 6A UTP Cable, 23 AWG Cable, Outdoor, PE Jacket, ETL Verified, UL Listed, RoHS, Black, 500m		
INC6AU4BKO-305	Category 6A UTP Cable, 23 AWG Cable, Outdoor, PE Jacket, ETL Verified, UL Listed, RoHS, Black, 305m		
INC6AU4BKO-153	Category 6A UTP Cable, 23 AWG Cable, Outdoor, PE Jacket, ETL Verified, UL Listed, RoHS, Black, 153m		
Available in 153, 305 and 500 meter Drum.			



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.

TEC-CS-212-1601-V02