infinique™

Category 6 F/UTP Cable

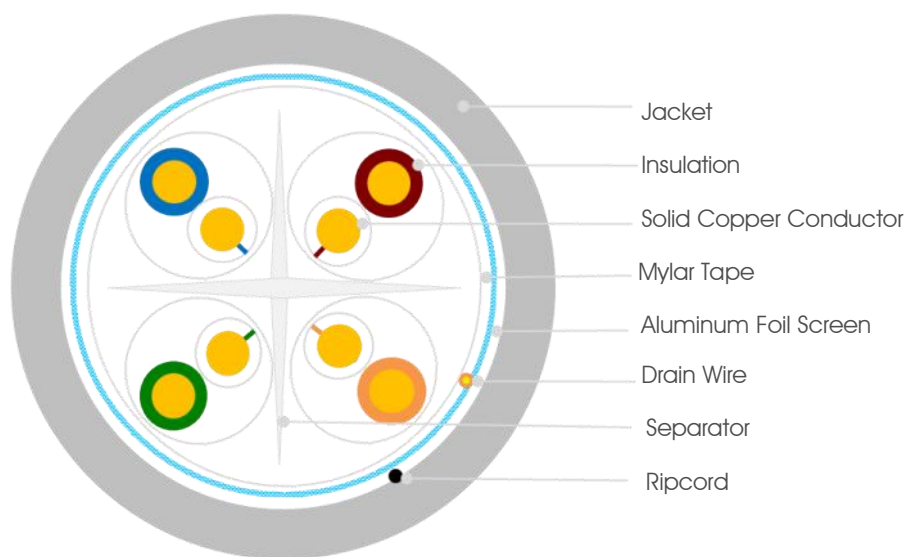Category 6 Foiled Unshielded Twisted Pair Cable

Infinique's Professional Series Category 6 F/UTP Cable is an excellent product which delivers superior network performance when used with used in conjunction with other Infinique's Category 6 FTP products. The cable is constructed of 4 pairs of solid and insulated solid copper conductors with a sheath of aluminum foil, which enhances the performance. It is designed for use in horizontal cabling and comes in a easy pull out box.

The Category 6 F/UTP Cable has a CMX jacket and is UL certified. It also supports PoE Power of 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**
  4-pair foiled construction 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

- Jacket
- Insulation
- Solid Copper Conductor
- Mylar Tape
- Aluminum Foil Screen
- Drain Wire
- Separator
- Ripcord

Category 6 F/UTP Cable

Category 6 Foiled Unshielded Twisted Pair Cable

ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω /100m
DC Resistance Unbalance	3%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impendence	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): 0.6c
Signal propagation Delay	>10MHz: 4,2ns/m
Delay Skew	<45ns/100m

PHYSICAL PROPERTIES

Conductor	Solid Bare Copper 23 AWG	Ø (mm): 0.565±0.003mm
Insulation	Material: Halogen Free Foam/Skin F-PE	Ø (mm): 1.1±0.005mm
	Average Thickness: 0.3875mm	Minimum Point Thickness: 0.385mm
Pairing	1 - Blue/White-Blue; 2 – Orange/White-Orange; 3 – Green/White-Green;
	4 – Brown/White-Brown
Spacer	PE (Polyethylene)
Barrier	Overall Polyester Tape, 25% Overlap
Screen Shield	Overall Aluminum Foil, Coverage 100%
Rip Cord	Nylon Thread
Drain Wire	24 AWG Solid Tinned Copper
Outer Jacket	Flame Retardant CMX Cable Jacket
	Diameter: 7.4 ± 0.2mm	Thickness: Avg-0.65mm, Min- 0.55mm
Pulling Tension Max	110N (25lbf)
Bend Radius	One Time: 4 x O.D. Installation: 8 x O.D.
Operating Temperature	-20℃ ~ 60℃
Storage Temperature	-20℃ ~ 75℃
Installation Temperature	0℃ ~ 90℃

TRANSMISSION PERFORMANCE

Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS NEXT (dB)	ELFEXT (dB/100m)	PS ELFEXT (dB/100m)	Return Loss (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 / COMPLIANCE

Meets or Exceeds EN 50288-4-1 up to 500MHz and IEC 61156-5 up to 500MHz
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

ETHERNET APPLICATIONS SUPPORTED

Suitable for 10GBase-T applications in accordance with IEEE 802.3an up to 500 MHz and 100 m.

ORDERING INFORMATION

Part Number	Description
INC6FU4GYL-500	Infinique Category 6 4-Pair FUTP Solid Copper, ROHS, LSOH Jacket Cable, 500m, Gray
INC6FU4GYR-500	Infinique Category 6 4-Pair FUTP Solid Copper, ROHS, CMX Jacket Cable, 500m, Gray
INC6FU4BKO-500	Infinique Category 6 4-Pair FUTP Solid Copper, ROHS, PE Jacket Cable, 500m, Black
Delivery: 500m (1640ft) packed in No-Snag Cable Reel	

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.