

# Category 6A F/FTP Cable

Category 6A Foiled Twisted Pair Cable, ETL Verified, RoHS Compliant

Infinique's Category 6A Augmented Screened F/FTP Cable, has been designed for high network performance of up to 550 MHz. It 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 overall cost savings.

Infinique Category 6A F/FTP cabling solution provides considerable margin above all electrical transmission performance requirements specified in ANSI/TIA-568-C.2, ISO/IEC 11801 and IEC-61156-5 and supports full duplex protocols delivering up to 10Gbps performance at frequency levels up to 550 Mhz. It provides improved bandwidth, data throughput and network efficiency and supports PoE Power of Ethernet standard (POE 802.3af) allowing data and power connection for POE equipments.

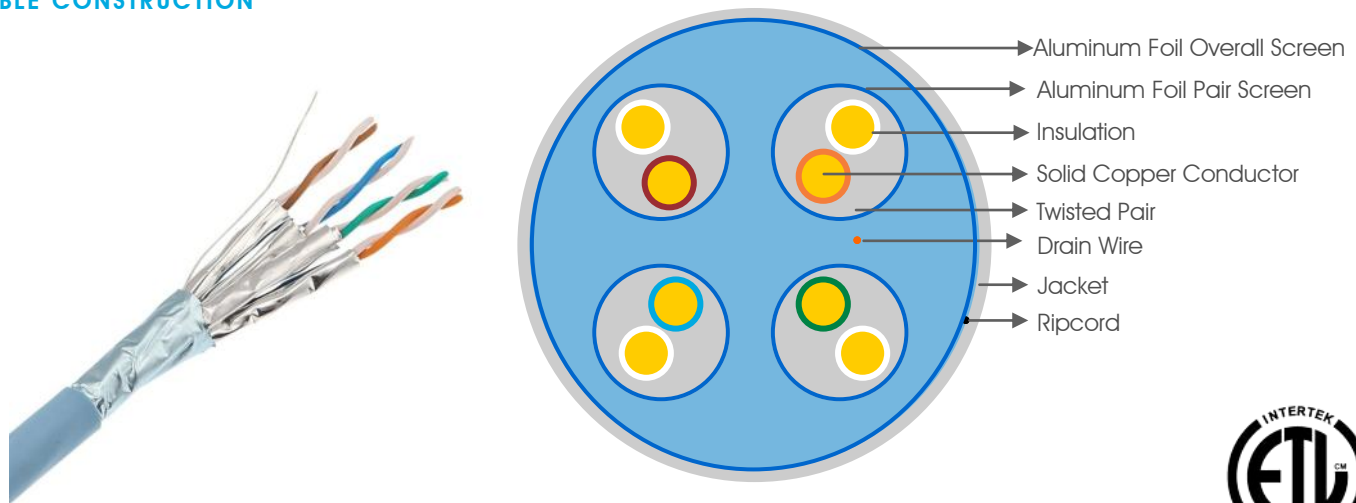
The cable jacket construction has tighter twists and its 4-pair construction with each individual pair surrounded with aluminum foil tape and an overall aluminum foil screen reduces alien crosstalk (AXT) coupling between adjacent cables and provides extra margin of performance required for high bandwidth applications.

The Category 6A F/FTP Cable collectively with other Infinique's Category 6A solution is the right solution for voice, data and video transmission needs. The Category 6A F/FTP Cable is offered in LSOH and CMX jackets in 1000 ft (305 m) reels to accommodate various installation requirements.

## Features and Benefits

- Certification**  
 ETL Verified for performance as per ANSI/TIA-568-C.2, ISO/IEC 11801 and IEC-61156-5 Category 6A standards
- Reliable Performance**  
 Designed for high network performance of 500 MHz of up to 100 meter channel links and support network links of 10 Gbps
- 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



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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 Impedance	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
Signal propagation Delay	>10MHz: 4,2ns/m
Delay Skew	<25ns/100m

## MATERIAL SPECIFICATIONS

Conductor	Solid Bare Copper 23 AWG, Ø 0.56mm ±0.005mm
Insulation	Material: Halogen Free Foam/Skin F-PE   Ø (mm): 1.330±0.005mm; Thickness: Avg: 0.3875mm   Min: 0.385mm
Cabling	Overall Aluminum Foil Screen, Four Aluminum Foil Screen Twisted Pairs
Pairing	1 - Blue/White-Blue; 2 – Orange/White-Orange; 3 – Green/White-Green; 4 – Brown/White-Brown
Drain Wire	TC 0.45mm
Rip Cord	Nylon Thread
Cable Jacket	LSOH Halogen Free Flame Retardant Cable Jacket; Diameter: 7.3 ±0.5mm   Thickness: Avg-0.55 ±0.5mm, Min- 0.55mm, RoHS
Cable Color	Gray
Cable Print	Black Color Ink, Letter Height 3.0 ±0.3mm
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)	PS ELFEXT (≥ dB)	RL (≥ dB)
1	-	74.3	72.3	68.0	65.0	20.0
4.0	3.8	65.3	63.3	56.0	53.0	23.0
8.0	5.3	60.8	58.8	49.9	46.9	24.5
10.0	5.9	59.3	57.3	48.0	45.0	25.0
16.0	7.5	56.2	54.2	43.9	40.9	25.0
20.0	8.4	54.8	52.8	42.0	39.0	25.0
25.0	9.4	53.3	51.3	40.0	37.0	24.3
31.25	10.5	51.9	49.9	38.1	35.1	23.6
62.5	15.0	47.4	45.4	32.1	29.1	21.5
100	19.1	44.3	42.3	28.0	25.0	20.1
200	27.6	39.8	37.8	22.0	19.0	18.0
250	31.1	38.3	36.3	20.0	17.0	17.3
300	34.3	37.1	35.1	18.5	15.5	16.8
500	45.3	33.8	31.8	14.0	11.0	15.2

## STANDARDS

ETL Verified for performance as per ANSI/TIA-568-C.2, ISO/IEC 11801 and IEC-61156-5 Category 6A  
 Low Smoke Emission as per IEC 61034 and EN 50268  
 Non Corrosive as per IEC 60754-2 and EN 50267

## PACKING

Meter Marking: INFINIQUE CANADA CAT.6A F/FTP 23AWG ETL VERIFIED ANSI/TIA-568-C.2, ISO/IEC 11801, IEC 61156-5 SN + \*\*\*\*m  
 305m (1000ft) packed in No-Snag Cable Reel

## ORDERING INFORMATION

INC6AFF4GYR	Infinique Category 6A F/FTP Cable, 23 AWG Cable, CMX Jacket, ETL Verified, Color Gray, 305m
INC6AFF4GYL	Infinique Category 6A F/FTP Cable, 23 AWG Cable, LSOH Jacket, ETL Verified, Color Gray, 305m

Infinique's Extended Product Warranty provides a 25-year product and applications assurance of compliance with the industry performance standards appropriate to the class of cabling installed. This is a link performance warranty, covering patch panel to outlet and may be applied for by an Authorized Infinique's Channel Partner who has designed, supplied and installed the system.



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).

[www.infinique.com](http://www.infinique.com)

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

Infinique Copper Systems

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