

Category 8.1 S/FTP Cable 25G/40G

Category 8.1 Shielded Foiled Twisted Pair Cable, RoHS Compliant

Infinique's Category 8.1 cable confirms to performance requirements of IEC 61156-5:2020, TIA-568.2-D:2018 up to 2000 MHz to support 30 meter Channels in IEEE 802.3bq 25 Gbps (25GBASE-T) and 40 Gbps (40GBASE-T) applications in the data center, PoE, PoE+, PoE++ applications.

Combined with Infinique's Category 8.1 Keystone Jacks and Patch Cords, we deliver a complete end-to-end solution that confirms to the ISO/IEC and TIA Category 8.1 specifications for 2-connector 30-meter channels for 25 Gbps and 40 Gbps applications.

It also complies with flammability, halogen acidity and smoke performance standards of IEC 60332-1-1:2015, IEC 60332-1-2:2015, IEC 60754-2:2019, IEC 61034-1:2019, IEC 61034-2:2019.

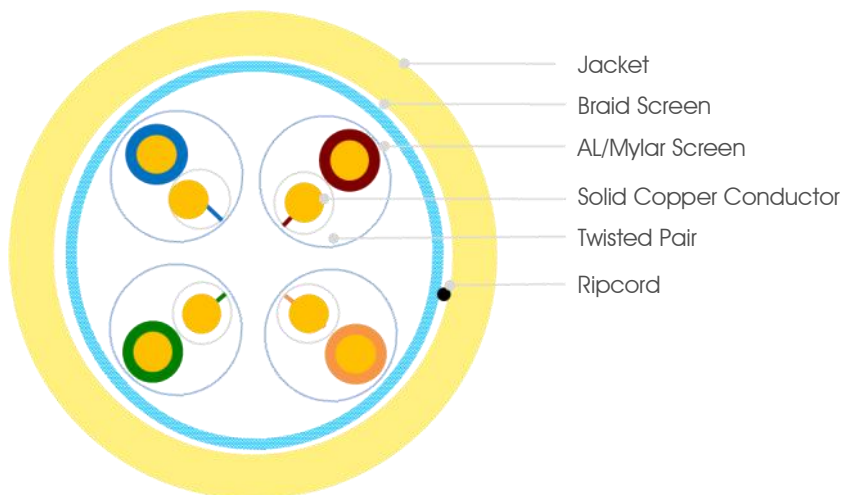
Category 8.1 is a fully shielded cable with construction that has tighter twists, its 4-pair construction with each individual pair surrounded with aluminum foil screen and outer braid screen provides superior noise immunity and coupling attenuation between adjacent cables and provides extra margin of performance required for high bandwidth applications.

The Category 8.1 S/FTP Cable collectively with other Infinique's Category 8.1 S/FTP solution is the right solution for data center and other applications where data transmissions at very high speeds of 2000 Mhz is required. The Category 8.1 S/FTP Cable is offered in reels to accommodate easy deployment.

Features and Benefits

- Certification**
 EC Verified for performance as per IEC 61156-5:2020, TIA-568.2-D:2018 Category 8.1 Standards
- Reliable Performance**
 Designed for high network performance of 2000 MHz of Up to 30 meter channel links and support network links of 25 and 40 Gbps for Data Centers
- Flammability, Halogen Acidity and Smoke Performance**
 Tested for IEC 60332-1-1:2015, IEC 60332-1-2:2015, IEC 60754-2:2019, IEC 61034-1:2019, IEC 61034-2:2019
- Performance Warranty**
 Qualifies for the Infinique's 25 Years System Performance Link Warranty

CABLE CONSTRUCTION



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ELECTRICAL SPECIFICATIONS

DC Resistance	<9.5Ω
DC Resistance Unbalance	2.0
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedence	100 Ω ± 5 @ 100MHz
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, Ø 0.596mm±0.005mm
Insulation	Material: Halogen Free Foam/Skin F-PE Ø (mm): 1.480±0.05mm; Thickness: Avg: 0.3875mm Min: 0.385mm
Twisted Pairs Screen	Aluminum Foil / Mylar
Outer Screen	Tinned Copper Wire Braiding Coverage Rate: ≥60%
Pairing	1 - Blue/White-Blue; 2 - Orange/White-Orange; 3 - Green/White-Green; 4 - Brown/White-Brown
Drain Wire	No
Rip Cord	Nylon Thread
Cable Jacket	LSOH Halogen Free Flame Retardant (IEC 60332-1); Diameter: 8.0 ±0.5mm Thickness: Avg-0.55 ±0.5mm, RoHS
Cable Color	Yellow RAL 1026, (Custom color available MOQ required)
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/30m)	NEXT (≥ dB)	PS NEXT (≥ dB)	RL (≥ dB)	ACR-F (≥ dB)	PS ACR-F (≥ dB)	ACR-N (≥ dB)	PS ACR-N (≥ dB)
1	3.0	65.0	62.0	19.0	65.0	62.0	62.0	59.0
4.0	3.0	63.8	60.5	19.0	59.9	56.9	60.8	57.5
8.0	3.0	58.9	55.6	19.0	53.9	50.9	55.9	52.6
10.0	3.0	57.3	54.0	19.0	52.0	49.0	54.3	51.0
16.0	3.0	53.9	50.6	18.0	47.9	44.9	50.9	47.6
20.0	3.0	52.3	49.0	17.5	45.9	42.9	49.3	46.0
25.0	3.2	50.7	47.3	17.0	44.0	41.0	47.5	44.1
31.25	3.6	49.1	45.7	16.5	42.1	39.1	45.5	42.1
62.5	5.1	44.0	40.6	16.0	36.0	33.0	38.9	35.5
100	6.5	40.5	37.1	16.0	32.0	29.0	34.0	30.6
200	9.3	35.3	31.9	14.3	25.9	22.9	26.0	22.6
250	10.4	33.6	30.2	13.4	24.0	21.0	23.2	19.7
300	11.5	32.3	28.8	12.7	22.4	19.4	20.8	17.3
400	13.3	30.1	26.6	11.6	19.9	16.9	16.8	13.2
500	15.0	27.9	24.8	10.7	18.0	15.0	12.9	9.9
600	16.5	25.7	22.7	10.0	16.4	13.4	9.2	6.2
1000	22.0	19.3	16.5	8.0	12.0	9.0	-2.6	-5.5
1500	27.7	13.9	11.2	8.0	8.4	5.4	-13.8	-16.4
2000	32.7	9.8	7.3	8.0	5.9	2.9	-22.9	-25.3

STANDARDS

EC Verified for performance as Generic Cabling Components Standards Category 8.1 Cable Requirements:

ISO/IEC 11801-1:2017 / ISO/IEC 11801-2:2017 / ISO/IEC 11801-5:2017

IEC 61156-5:2020 / IEC 61156-9:2016

EN 50173-1:2018 / EN 50173-2:2018 / E 50173-5:2018

EN 50288-9-1:2012 / EN 50288-13-1

TIA-568.2-D:2018

Standards for Flammability, halogen acidity, and smoke performance:

IEC 60332-1-1:2015, IEC 60332-1-2:2015,

IE 60754-2:2019,

IEC 61034-1:2019, IEC 61034-2:2019

PACKING

Mefer Marking: INFINIQUE CANADA CAT.8.1 S/FTP ANSI/TIA-568.2-D, ISO/IEC 11801-1, IEC 61156-9 SN + ****m

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

ORDERING INFORMATION

INC81S4YWL-500	Infinique Category 8.1 S/FTP Cable, 25/40G EC Verified ANSI/TIA-568.2-D, ISO/IEC 11801-1, IEC 61156-9, Yellow, LSOH Jacket, 500m
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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.