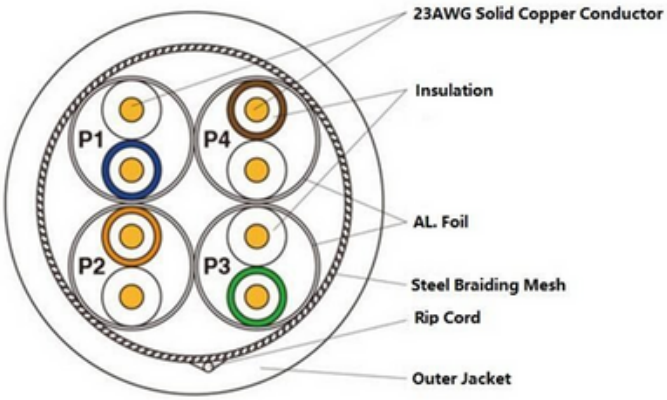
PRODUCT DATA SHEET

CAT7 S FTP CABLE

MAIN STRUCTURE



DESCRIPTION:

INSHEILD® Category 7 S/FTP cables are specifically designed to deliver robust standards-based performance ensuring optimum bandwidthfor today's high-speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 meters.
Each Category 7 S/FTP exceed the minimum specified performance for Category 7 S/FTP cables and support all CLASS F applications

APPLICATION

- Supports category 7 (Class F) networks running up to 600MHz applications
- Ideal for environments where external interferences can disrupt signals
- Horizontal and back bone in structured cabling installations
- Power over Ethernet (PoE/POE +)
- ATM and token ring
- Power over Ethernet
- Wireless connectivity
- Security cameras

FEATURES

- Conform to IEC, EIA-TIA performance requirements
- 23AWG premium grade copper conductor
- S/FTP cable structure for better shielding in heavy external interference environments
- Support application with PoE, IEEE 802.3bt PoE++ Type 4
- Cable jacket available in LSZH, CM, PVC

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SPECIFICATIONS	
Parameters	**Value**
Electrical Performance	Certified performance in a 4-connector configuration up to 100 meters
Conductor/Insulator	23 AWG solid copper insulated with HPDE
Operating Temperature	-20°C / +75°C
PoE Application	IEEE 802.3bt PoE++ Type 4
Compliance	ANSI/TIA-568-C.2, ISO 11801, IEC 60603-7
RoHS Compliance	Compliant
CPR Reaction to Fire Classification	Cca-s1a,d1,a1
Cable OD	8.0mm±0.2mm
Shielding	S/FTP, An aluminized polyester tape applied with a 15% minimum overlap at each pair, the overall 4 pairs are shielded with aluminum-magnesium alloy braiding, 64 x 0.12mm, coverage 40%.
Insulation	Skin-foam-skin PE
Pair Color Codes	Pair 1: White, and Blue Pair 2: White, and Orange Pair 3: White, and Green Pair4: White, and Brown
	Blue (RAL 5012)
Sheath Color	Grey (RAL 7046)
	Black (RAL 9005)
Conductor	23AWG solid copper

CABLE SPECIFICATION (ELECTRICAL PROPERTIES)		
Parameters	**Units**	**Value**
	(1-100MHz)	100 ±15Ω
Characteristic Impedance	(100-250MHz)	100 ±18Ω
	(250-500MHz)	100 ±25Ω
DC Resistance	Ω/100m	≤ 9.5Ω/100m max.
Resistance Unbalance	%	≤ 2%
Capacitance Unbalance to Earth	Pf/km	≤ 1600 pF/km
Delay Skew	ns/100m	≤ 25ns/100m
Nominal Velocity of Propagation	%	0.7
Propagation Delay (Nominal)	ns/100m	535ns/100m at 500MHz
Test Voltage (d.c. for 1 minute) Conductor /Conductor	VDC	1000V
Insulation Resistance (500V d.c)	MΩ	≥ 500MΩ/KM
Max. Operating Voltage	V	80V

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TRANSMISSION LINE PERFORMANCE AT 20°C							
Freq. MHz	**RL**	**ATT**	**NEXT**	**PHASE DELAY**	**PSNEXT**	**ELFEXT**	**PSELFEXT**
	≥dB	≤dB	≥dB	≤ns	≥dB	≥dB	≥dB
1	20	2	78	570	75	78	75
4	23	3.7	78	552	75	78	72.9
8	24.5	5.2	78	546.7	75	75.9	71
10	25	5.9	78	543	75	74	66.9
16	25	7.4	78	542	75	69.9	65
20	25	8.3	78	541.2	75	68	63
25	24.3	9.3	78	540.4	75	66	61.1
31.3	23.6	10.4	78	538.6	75	64.1	55.2
62.5	21.5	14.9	75.5	537.6	72.5	58.1	51
100	20	19	72.4	566.9	69.4	54	47.3
150	18.9	23.6	69.8	536.5	66.8	50.2	45
200	17.3	27.5	67.9	536.3	64.9	48	43
250	17.3	31	66.4	536.1	63.4	46	41.5
300	17.3	34.2	65.2	535.1	62.2	44.5	35.4
600	17.3	50.1	60.7	535.5	57.7	38.4	32.9
800*	17.3	58.92	58.9	535.3	55.9	35.9	31.5
1000*	13.1	66.93	57.4	535.1	54.4	34	31