

ExTell Shielded Cat6 Network Cable Solutions

CAT6 S/FTP 23AWG Solid Bare Copper LSZH Network Cable | 4 pair | 250MHz | Lilac

Reference Standards : ISO/IEC 11801 | ANSI/TIA-568.2-D | IEC 61156-5 | EN 50173-1/-2 | EN 50288-3-1 | IEC 60332-1-2 | IEC 60754-2 | IEC 61034-2 | UL 444 | RoHS

Reliable Connectivity

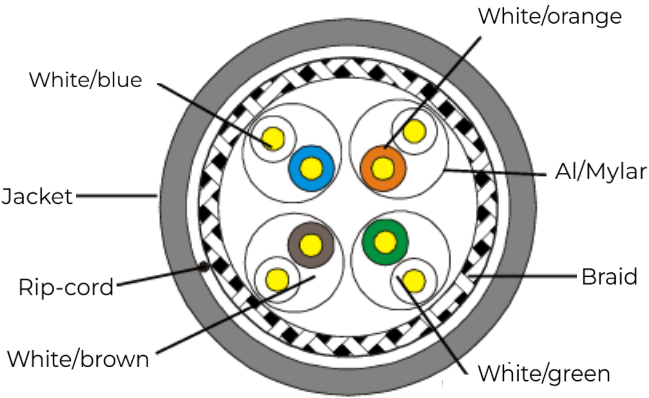
Engineered Performance

Trusted Infrastructure

Product Overview

The ExTell CAT6 S/FTP Network Cable is engineered for high-performance structured cabling systems requiring enhanced protection against electromagnetic interference (EMI), alien crosstalk, and stringent fire safety requirements. Constructed with 23AWG solid bare copper conductors, skin-foam-skin polyethylene insulation, individually foil-shielded twisted pairs, an overall aluminium-magnesium alloy braided shield, rip cord, and a Low Smoke Zero Halogen (LSZH) outer sheath, the cable is designed to deliver reliable Category 6 transmission performance up to 250 MHz. Its shielded construction and LSZH jacket make it particularly suitable for network infrastructures where electromagnetic compatibility, signal integrity, and reduced smoke and halogen emissions and superior shielding are essential design considerations like healthcare facilities, commercial buildings, enterprise networks, data centers, educational institutions, transportation infrastructure, and other indoor environments.

Product Image



Product Highlights

- Category 6 S/FTP Shielded LAN Cable
- 23AWG Solid Bare Copper Conductors
- Individually Foil Shielded Twisted Pairs with Overall Braided Shield
- Low Smoke Zero Halogen (LSZH) Outer Sheath
- 250 MHz Category 6 Transmission Performance
- Enhanced Protection Against EMI & Alien Crosstalk
- Designed for High Electromagnetic Compatibility (EMC) Environments
- Ideal for Data Centres, Healthcare Facilities & Commercial Buildings
- Suitable for Mission-Critical Structured Cabling Infrastructure

Cable Construction Specifications

Component	Material	Specification
Cable Category	LAN Cable	Category 6 S/FTP
Conductor	Solid Bare Copper	23AWG (0.550 ± 0.005 mm)
Insulation	Skin-Foam-Skin Polyethylene (PE)	Ø1.28 ± 0.05 mm
Pair Configuration	Twisted Pair	4 Pairs
Individual Pair Shield	Aluminium / Mylar Foil	Individual Pair Screening
Drain Wire	Tinned Copper Drain Wire	Included
Overall Shield	Aluminium-Magnesium Alloy Braid	≥30% Braid Coverage
Rip Cord	Rip Cord	Included
Outer Jacket	Low Smoke Zero Halogen (LSZH)	Lilac
Jacket Thickness	LSZH	0.50 ± 0.05 mm
Overall Cable Diameter	Cable	6.9 ± 0.5 mm
Standard Reel Length	Installation Reel	305 m



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Mechanical & Environmental Specifications

Parameter	Specification
Operating Temperature	-30°C to +60°C
Characteristic Impedance	100 ± 15 Ω (1-250 MHz)
Propagation Delay Difference (Delay Skew)	≤45 ns /100 m
DC Resistance	≤9.38 Ω/100 m
DC Resistance Unbalance	≤5 %
Unbalanced Capacitance to Ground	≤330 pF/100 m
Jacket Tensile Strength (Before Ageing)	≥10.0 MPa
Jacket Elongation (Before Ageing)	≥125 %
Ageing Condition	100°C × 24 h × 7 Days
Jacket Tensile Strength (After Ageing)	≥8.0 MPa
Jacket Elongation (After Ageing)	≥100 %
Cold Bend Test	-20 ±2°C × 4 h, 8 × Cable O.D., No Visible Cracks
Flame Propagation	IEC 60332-1-2
Halogen Acid Gas Emission	IEC 60754-2
Smoke Density Performance	IEC 61034-1 / IEC 61034-2
Environmental Compliance	RoHS Compliant

Electrical Performance Characteristics

Frequency (MHz)	Return Loss (dB)	Attenuation (dB/100m)	NEXT (dB)	PSNEXT (dB)	EL-FEXT (dB)	PSELFEXT (dB)
1.0	20.0	—	74.3	72.3	67.8	64.8
4.0	23.0	3.78	65.3	63.3	55.8	52.8
8.0	24.5	5.32	60.8	58.8	49.7	46.7
10.0	25.0	5.95	59.3	57.3	47.8	44.8
16.0	25.0	7.55	56.2	54.2	43.7	40.7
20.0	25.0	8.47	54.8	52.8	41.8	38.8
25.0	24.3	9.51	53.3	51.3	39.8	36.8
31.25	23.6	10.67	51.9	49.9	37.9	34.9
62.50	21.5	15.38	47.7	45.4	31.9	28.9
100.0	20.1	19.80	44.3	42.3	27.8	24.8
200.0	18.0	28.98	39.8	37.8	21.8	18.8
250.0	17.3	32.85	38.3	36.3	19.8	16.8



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Standards & Compliance

Standard Reference	Description
ISO/IEC 11801	International generic cabling standard for structured cabling systems.
ANSI/TIA-568.2-D	Category 6 balanced twisted-pair cabling performance requirements.
IEC 61156-5	Multi-pair communication cable performance specification for Category 6 balanced cables.
EN 50173-1	Generic Information Technology cabling systems.
EN 50173-2	Structured cabling requirements for office premises.
EN 50288-3-1	Performance specification for shielded metallic communication cables.
IEC 60332-1-2	Flame propagation test for a single insulated cable.
IEC 60754-2	Determination of acidity and conductivity of gases evolved during combustion of halogen-free materials.
IEC 61034-1	Measurement of smoke density generated by burning cables.
IEC 61034-2	Test method for smoke density measurement.
UL 444	Communications cable safety and construction requirements.
UL 1581	Electrical wire and cable reference standard for construction and testing.
RoHS Directive 2011/65/EU	Restriction of Hazardous Substances compliance.

Ordering Information

Part Number	Product Description
E6XFLI3-S-LC	ExTell CAT6 S/FTP 23AWG LSZH Sheath, Network Cable, 305m, Lilac .