



S/FTP cat. 7 1.2GHz Cable, 4 Pairs 23AWG, 1000m Reel

Features summary

C7 S/FTP Cable (each pair has individual shield plus common shield for the cable made of tinned copper braid) is a complementary product for shielded PowerCat 6 and PowerCat 6A (with limitations) systems. Products meets requirements of C7 in a 1-600MHz range as per IEC 61156-5 (specified in ISO/IEC 11801 2nd edition) and is tested in 1.2GHz range for reference.

Each pair in the cable has an individual shield made of aluminium foil, all pairs are twisted together and covered with common braid shield and jacketed.

S/FTP construction helps to reduce PowerSum NEXT and PowerSum ELFEXT as well as helps to provide outstanding headroom for NEXT. Also Alien NEXT is significantly reduced so the Cable can be used for 10G Application.

Cable is suitable for horizontal cabling in high speed data transmission networks as well as vertical cabling for data. Outer jacket is made of un-flammable PVC or LSZH (Low Smoke Zero Halogen) material. Small outside diameter, high flexibility and superior electrical performance are key features of the product. Cable is delivered in 1000m lengths on wooden, fully recyclable reels for ease of installation. Indoor use only.

Features and benefits

- Transmission performance C7 in a 1-600MHz range as per IEC 61156-5 (specified in ISO/IEC 11801 2nd edition) and is tested in 1.2GHz range for reference.
- Provide significant margins for NEXT, PowerSum NEXT, PowerSum ELFEXT
- Alien NEXT is significantly reduced so it can be used for 10G Application
- Small outside diameter, high flexibility
- Delivered in 1000m lengths on wooden, fully recyclable reels

Commercial Standards

IEC 61156-5 (specified in ISO/IEC 11801 2nd edition for category 7, TIA/EIA 568B.2-1 for category 6, TIA-568-C.2 for category 6 and 6A, ISO 11801:2002, EN50173:2007, IEC 60332-1, IEC 60754 (gas) and IEC 61034 (smoke)

Mechanical Parameters

Conductor size [mm]:	23 AWG (0.57mm)
Insulated conductor diameter [mm]:	1.0 nom OD
Color code:	Blue x White, Orange x White, Green x White, Brown x White
Pair number:	4
Outside cable diameter [mm]:	7.0 max
Individual pair shield:	Aluminium foil, providing 100% coverage, foil face out
Drain Wire:	None
Overall shield:	Tinned copper braid
Temperature range [°C]	
during installation:	0°C to +50°C
during operation:	-20°C to +60°C
during storage:	-20°C to +60°C
Acceptable bend radius	
during installation:	8 x cable size
during operation:	4 x cable size
Pulling force:	100N max
Sheath:	FR-PVC or LSZH
Flame test for LSZH:	IEC 60332-1
Gas & smoke test for LSZH:	IEC 60754 (gas) and IEC 61034 (smoke)
Sheath color PVC:	Gray RAL7035
Sheath color LSZH:	Violet RAL4005
Shipping weight [kg]:	48
Cable length tolerance:	+/- 5%



Electrical parameters:

Characteristic Impedance [Ω]:	100 \pm 5 @ 1-250 MHz
DC Resistance [Ω /Km]:	60 max.
Resistance unbalance [%]:	2% max.
Capacitance [pF/m]:	45 nom. @ 1 KHz
Cap. Unbalance (wire to ground) [pF/Km]:	1500 max. @ 1 KHz.
Voltage rating [Vdc]:	72 max.
NVP:	77-80% - printed on a jacket
Delay Skew [nS/100m]:	25nS/100m max. @ 1-1200 MHz
Insulation Resistance [$M\Omega \cdot Km$]	5000 min. @ 500 Vdc
Coupling attenuation:	85 dB min @ 30-100 MHz 85-20Log(f/100) @ 100-600 MHz
Screening attenuation:	60dB min @ 30-600MHz
Transfer Impedance:	10m Ω /m max. @ 1-30MHz 30m Ω /m max. @ 30-100MHz

REFERENCE INFORMATION

Part number	Name
CAA-00357	S/FTP cat. 7, 1.2GHz Cable, 4 Pairs 23AWG PVC - 1000m Reel, Grey
CAA-00358	S/FTP cat. 7, 1.2GHz Cable, 4 Pairs 23AWG LSZH - 1000m Reel, Violet

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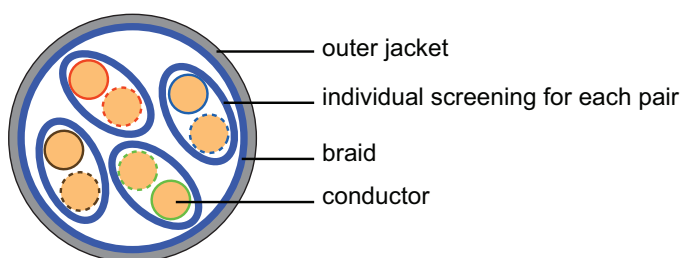
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Transmission parameters

Transmission Properties and Electrical Specifications										
FREQ.	Insertion Loss	NEXT	PS NEXT	ELFEXT	PS ELFEXT	RL	TCL	EL-TCL	PS ANEXT	PS AFEXT
MHZ	dB/100m	dB	dB	dB/100m	dB/100m	dB	dB	dB	dB	dB
	Max	Min	Min	Min	Min	Min	Min	Min	Min	Min
1	NS	78.0	75.0	78.0	75.0	20.0	40.0	35.0	67.0	67.0
4	3.74	78.0	75.0	78.0	75.0	23.0	40.0	23.0	67.0	67.0
8	5.24	78.0	75.0	75.9	72.9	24.5	40.0	16.9	67.0	67.0
10	5.86	78.0	75.0	74.0	71.0	25.0	40.0	15.0	67.0	67.0
16	7.41	78.0	75.0	79.9	66.9	26.0	38.0	10.9	67.0	67.0
20	8.29	78.0	75.0	68.0	65.0	25.0	37.0	9.0	67.0	67.0
25	9.29	78.0	75.0	66.0	63.0	24.3	36.0	7.0	67.0	65.2
31.25	10.41	78.0	75.0	64.1	61.1	23.6	35.1	5.1	67.0	63.3
62.5	14.88	75.5	72.5	58.0	55.1	21.5	32.0	NS	67.0	57.3
100	19.02	72.4	69.4	54.0	51.0	20.1	30.0	NS	67.0	53.2
150	23.56	69.8	66.8	50.0	47.5	18.9	28.2	NS	67.0	49.7
200	27.47	67.9	64.9	48.0	45.0	18.0	27.0	NS	67.0	47.2
250	30.97	66.4	63.4	46.0	43.0	17.3	26.0	NS	67.0	45.2
300	34.19	65.2	62.2	44.5	41.5	17.3	NS	NS	67.0	43.7
400	40.01	63.4	60.4	42.0	39.0	17.3	NS	NS	67.0	41.2
500	45.26	61.9	58.9	40.0	37.0	17.3	NS	NS	67.0	39.2
600	50.10	60.7	57.7	38.4	35.4	17.3	NS	NS	65.8	37.6
700	54.63	59.7	56.7	37.1	34.1	16.6	NS	NS	64.8	36.3
800	58.92	58.9	55.9	35.9	32.9	16.1	NS	NS	64.0	35.1
1000	66.93	57.4	54.4	34.0	31.0	15.1	NS	NS	62.5	33.2
1200	74.36	56.2	53.2	32.4	29.4	14.3	NS	NS	61.3	31.6

Values above 600MHz are for reference only

S/FTP C7 Cable


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