S/FTP cat. 7A 1.2GHz Cable, 4Pairs, 500m Reel
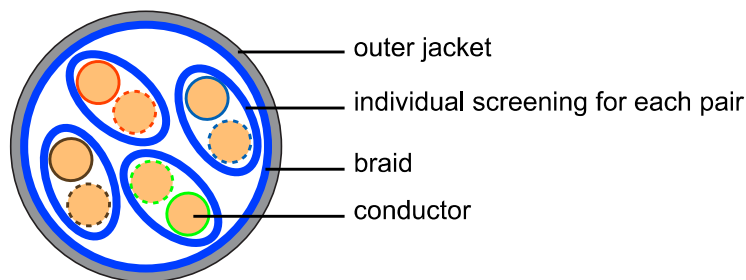
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C7A S/FTP Cable (each pair has individual shield plus common shield for the cable made of tinned copper braid) is a complementary product forshielded PowerCat 6 and PowerCat 6A (with limitations). The product meets requirements of C7A in a 1-1000MHz range as per IEC 61156-5 (specified in ISO/IEC 11801 2nd edition).

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. The S/FTP construction helps to reduce PowerSum NEXT and PowerSum ELFEXT, as well as helps to provide outstanding headroom for NEXT. Alien NEXT is also significantly reduced so the cable can be used for 10G applications.

The Cable is suitable for horizontal cabling in high speed data transmission networks as well as vertical cabling for data. The outer jacket is made of un-flammable PVC or LSOH (Low Smoke Zero Halogen) material. Small outside diameter, high flexibility and superior electrical performance are key features of the product. Cable is delivered in 500m lengths on wooden, fully recyclable reels for ease of installation. Indoor use only.

S/FTP C7A Cable

- outer jacket
- individual screening for each pair
- braid
- conductor

Features and Advantages

Transmission performance C7A in a 1-1000MHz range as per IEC 61156-5 (specified in ISO/IEC 11801 2nd edition)

Provide significant margins for NEXT, PowerSum NEXT, PowerSum ELFEXT

Alien NEXT is significantly reduced so it can be used for 10G applications

Small outside diameter, high flexibility

Delivered in 500m lengths on wooden, fully recyclable reels

Reaction to Fire Euroclas - Dca, s1a, d1, a1

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Specifications

COMMERCIAL STANDARDS

IEC 61156-5 (specified in ISO/IEC 11801 2nd edition) for category 7A, TIA/EIA 568B.2-1 for category 6,TIA-568-C.2 for category 6, 6A , ISO/IEC Ed2.2 1801:2011, EN50173:2011, IEC 60332-1, IEC 60754 (gas) and IEC 61034 (smoke) RoHs compliant

FIRE PROPAGATION TESTS

EU Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
Euroclass Dca-s1a,d1,a1
DoP no. : MLXCES-2017 - C - 015
located on the web http:
//www.molexces.co.uk/about-us/
our-compliance/cpr/dop-certificates/

MECHANICAL

Conductor size [mm]:	23 AWG (0.5733 mm)
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]:	7.2 max
Individual pair shield:	Aluminium foil, providing 100% coverage, foil face out
Drain Wire:	None
Overall shield:	Tinned copper braid
Temperature range	
during installation:	0 to +50°C
during operation:	-20 to +60°C
during storage:	-20 to +75°C
Acceptable bend radius	
during installation:	8 x cable size
during operation:	4 x cable size
Pulling force:	150N max
Sheath:	FR-PVC or LS0H
Sheath color LS0H:	Violet RAL4005
Shipping weight [kg]:	26
Cable length tolerance:	+/- 5%

ELECTRICAL

Characteristic Impedance :	100+/-5 Ohm @1-1000Mhz
DC Resistance:	77 Ohm/km max.(2% max. resistance unbalance)
Capacitance [pF/m]	
@ 1 KHz:	45 nominal
Cap. Unbalance (wire to ground)[pF/Km]	
@ 1 KHz:	1.6 maximum
Voltage rating [Vdc]:	72 max.
NVP:	75-77%
Delay Skew [nS/100m]:	15nS/100m max @ 4-1000MHz
Insulation Resistance :	0.5G Ohm-Km min.
Coupling attenuation :	IEC 61156-5 TYPE 1
Transfer Impedance :	IEC 61156 Grade 1

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TRANSMISSION PROPERTIES AND ELECTRICAL SPECIFICATIONS

Frequency MHz	Insertion Loss	NEXT	PS NEXT	EL FEXT	PS ELFEXT	RL	TCL	EL-TCL	PS ANEXT	PS AFEXT
	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	3.75	78.0	75.0	78.0	75.0	23.0	40.0	23.0	67.0	67.0
10	5.82	78.0	75.0	75.1	72.1	25.0	40.0	15.0	67.0	67.0
20	8.21	78.0	75.0	69.1	66.1	25.0	37.0	9.0	67.0	67.0
25	9.18	78.0	75.0	67.1	64.1	24.3	36.0	7.0	67.0	65.2
31.25	10.26	78.0	75.0	65.2	62.2	23.6	35.1	5.1	67.0	63.3
62.5	14.57	78.0	75.0	59.2	56.2	21.5	32.0	NS	67.0	57.3
100	18.53	75.4	72.4	55.1	52.1	20.1	30.0	NS	67.0	53.2
200	26.47	70.3	67.9	49.1	46.1	18.0	27.0	NS	67.0	47.2
250	29.73	69.4	66.4	47.1	44.1	17.3	26.0	NS	67.0	45.2
300	32.69	68.2	65.2	45.6	42.6	17.3	NS	NS	67.0	43.7
400	38.01	66.4	63.4	43.1	40.1	17.3	NS	NS	67.0	41.2
500	42.76	64.9	61.9	41.1	38.1	17.3	NS	NS	67.0	39.2
600	47.10	63.7	60.7	39.5	36.5	17.3	NS	NS	65.8	37.6
700	51.13	62.7	59.7	38.2	35.2	16.6	NS	NS	64.0	36.3
800	54.92	61.9	58.9	37.0	34.0	16.1	NS	NS	64.0	35.1
1000	61.93	60.4	57.4	35.1	32.1	15.1	NS	NS	62.5	33.2
1200	68.36	59.2	56.2	33.5	30.5	14.3	NS	NS	61.3	31.6

Ordering Information

Order No.	SAP No.	Description
CAA-00360	Consult Molex	S/FTP cat. 7A 1.2GHz Cable, 4 Pairs LSZH, Euroclass Dca-s1a, d1, a1 - 500m Reel, Violet

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