

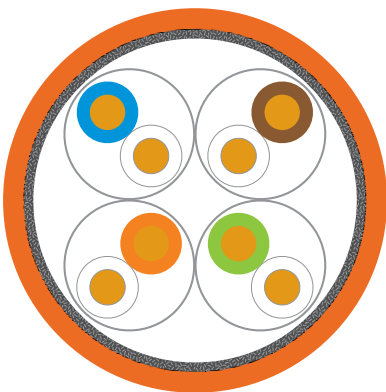
PRODUCT SPECIFICATIONS

C6SF Cat 6 S/FTP Euroclass B2ca Cables

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APPLICATION

Leviton Category 6 S/FTP cables exceed Category 6 performance standards. They are rated to 250 MHz and are suitable for use in all Class E structured wiring cable systems. The applications supported include Gigabit Ethernet, Power over Ethernet (PoE), and broadband video transmissions at frequencies up to 250 MHz.



COUNTRY OF ORIGIN

UK

WARRANTY INFORMATION

For Leviton product warranties, go to [Leviton.com/ns/warranty](https://leviton.com/ns/warranty)

FEATURES & BENEFITS

- 23 AWG solid annealed copper wire
- 4 twisted pairs individually screened and cabled together – providing excellent EMI immunity
- Overall braided screen – for improved shielding efficiency, increased mechanical robustness, and heat dissipation
- Designed to support all Class E protocols including Gigabit Ethernet
- HFFR-LS material meets the requirements of the Construction Products Regulation (CPR) Euroclass B2ca
- CE marked for CPR
- Orange jacket to identify Euroclass level B2ca
- Designed and manufactured in Leviton's carbon neutral UK facility

STANDARDS & REGULATIONS

- ISO/IEC 11801 Class E
- IEC 61156-5
- EN 50173-1 and EN 50288-5-1
- ANSI/TIA 568.2
- IEEE 802.3 PoE Type 1, 2, 3, 4 (100 watts max)
- Cisco UPOE, UPOE+ (90 watts max)
- Power over HDBaseT™ PoH (95 watts max)

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TECHNICAL SPECIFICATIONS

Primary Electrical Parameters	Specification	Typical Performance
Conductor loop resistance	Max 19 Ω /100 m	14 Ω /100 m
Conductor resistance unbalance	Max. 2 %	0.1 %
Insulation resistance	>5 G Ω · km	>50 G Ω · km
Dielectric strength	2500 V DC for 2 s	Pass
Secondary Electrical Parameters		
Propagation delay	538 ns/100 m @ 100 MHz	413 ns/100 m @ 100 MHz
Delay skew	45 ns/100 m @ 100 MHz	4 ns/100 m @ 100 MHz
Mean characteristic impedance	100 Ω $\pm$ 5 Ω @ 100 MHz	100 Ω $\pm$ 3 Ω @ 100 MHz
Coupling attenuation	Type 1	90 dB
Transfer impedance	Grade 1	8 m Ω /m @ 10 MHz

INSTALLATION CHARACTERISTICS

Usage Characteristics	
Conductor	23 AWG bare copper
Category	Cat 6
Type of cable	S/FTP
Temp. (Installation)	0 °C to +50 °C (+32 °F to +122 °F)
Temp. (Operating)	-20 °C to +75 °C (-4 °F to +167 °F)

TECHNICAL DATA - PHYSICAL

Max. tensile load (Installation)	10 kg
Segregation class	Class D
Min. bend radius (Installation)	8 x Outer Diameter
Min. bend radius (Operation)	4 x Outer Diameter
Field test NVP value	0.80

REACTION TO FIRE

Characteristic	IEC Standard	EN Standard	CPR Rating
Classification / Euroclass	—	EN 13501-6	B2ca s1a d0 a1
Single Cable Flame Rating	IEC 60332-1-2	—	Pass
Bundled Cable Flame Rating	IEC 60332-3-24	EN 50399 20.5kW	B2ca
Smoke Production	—	EN 50399 & EN61034-2	s1a
Flaming Droplets/Particles	—	EN 50399	d0
Acid Gas Emission/Acidity	—	EN 60754-2	a1

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PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS

Freq. MHz	IL (dB)		NEXT (dB)		PSNEXT (dB)	
	Standard	Typical	Standard	Typical	Standard	Typical
1	2.0	1.9	75.3	100.0	72.3	97.0
4	3.8	3.5	66.3	100.0	63.3	97.0
10	6.0	5.5	60.3	100.0	57.3	97.0
20	8.5	7.8	55.8	100.0	52.8	97.0
100	19.8	18.0	45.3	94.3	42.3	91.3
200	29.0	26.1	40.8	88.9	37.8	85.9
250	32.8	29.4	39.3	87.1	36.3	84.1
500	—	43.0	—	81.7	—	78.7
550	—	45.4	—	81.0	—	78.0

Note: The standard values shown are the most demanding taken from the relevant IEC, TIA and EN specifications. These standard values are the maximum permissible for Insertion loss and the minimum permissible for other parameters.

PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS, CONTINUED

Freq. MHz	RL (dB)		ACRF (dB)		PSACRF (dB)	
	Standard	Typical	Standard	Typical	Standard	Typical
1	20.0	27.0	68.0	90.0	65.0	87.0
4	23.0	30.0	58.0	90.0	55.0	87.0
10	25.0	30.0	50.0	90.0	47.0	87.0
20	25.0	30.0	44.0	84.8	41.0	81.8
100	20.1	25.1	30.0	70.8	27.0	67.8
200	18.0	23.0	24.0	64.8	21.0	61.8
250	17.3	22.3	22.0	62.8	19.0	59.8
500	—	20.2	—	56.8	—	53.8
550	—	19.9	—	56.0	—	53.0

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STANDARD PACKAGING SPECIFICATIONS - REELS							
Part Number	Packaging Length (m)	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange Dia. x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
C6S/FTP-B2ca-500OR	500	Orange	7.0	54.3	400 x 390	29.6	12
C6S/FTP-B2ca-1000OR	1000	Orange	7.0	54.3	400 x 390	60.8	12

For further support information, visit [Leviton.com/ns/support](https://leviton.com/ns/support)

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