# Category 6 S/FTP EuroClass B2ca Cables

Datasheet: SS1328-AP-EU-ME ENv1

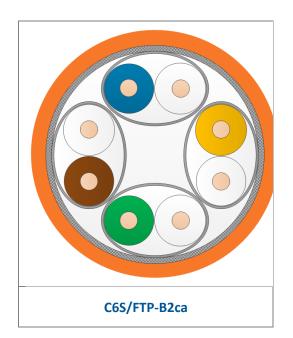


## **APPLICATION**

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

#### **FEATURES AND BENEFITS**

- 23 AWG solid annealed copper wire
- 4 twisted pairs individually screened and cabled together providing 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
- Enhanced HFFR-LS\* material meets the requirements of the Construction Products Regulation (CPR) EuroClass B2ca
- CE marked for CPR
- Orange colored jacket to identify EuroClass level B2ca
- Included in the Leviton Limited 25-Year System Warranty when used in conjunction with Leviton copper connectivity. System warranties are available for qualified projects installed by certified contractors



#### **STANDARDS**

- Designed and constructed to give optimum electrical performance to the following standards:
  - ISO/IEC 11801 Class E, IEC 61156-5
  - EN 50173-1 and EN 50288-5-1
  - ANSI/TIA 568.2-D
- Supports Gigabit Ethernet. Recommended for PoE standards:
  - IEEE 802.3bt PoE Type 1 (15.4 Watts) formerly 802.3af and IEEE 802.3bt PoE Type 2 (30 Watts) formerly 802.3at
  - IEEE 802.3bt PoE Type 3 (60 Watts) and IEEE 802.3bt PoE Type 4 (90 Watts)
  - Exceeds IEEE 802.3bt standard up to 0.5 amps per conductor (100 watts) continuously
  - Cisco UPoE (60 Watts), Cisco UPoE+ (90 Watts) and Power over HDBaseT™ PoH (95 Watts)

#### **REACTION TO FIRE**

CHARACTERISTIC	STANDARD	RATING		
IFC CO222 Cable Flower Boting	IEC 60332-1-2	Pass		
IEC 60332 Cable Flame Rating	IEC 60332-3-24	Pass		
Bundled Cable Flame Rating	EN 50399 20.5kW source	B2ca		
Smoke Production	EN 50399 & EN61034-2	s1a		
Flaming Droplets/Particles	EN 50399	d0		
Acid Gas Emission/Acidity	EN 50267-2-3	a1		
Classification/EuroClass	EN 13501-6	B2ca s1a d0 a1		

<sup>\*</sup>Halogen Free Flame Retardant – Low Smoke

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#### **PRIMARY ELECTRICAL PARAMETERS**

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C			
Conductor Loop Resistance	Max 19 Ω/100m	14Ω/100m			
Conductor Resistance Unbalance	Max 2%	0.1%			
Insulation Resistance	>5GΩ.km	>50GΩ.km			
Dielectric Strength	2500 Vdc/2secs	Pass			

#### **SECONDARY ELECTRICAL PARAMETERS**

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C		
Velocity of Propagation	<534nsec/100m @ 100MHz	413nsec/100m @ 100MHz		
Delay Skew	Max 45nsec/100m @ 100MHz	4nsec/100m @ 100MHz		
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω ± 3Ω @ 100MHz		
Coupling Attenuation	Type 1	90dB		
Transfer Impedance	Grade 1	8mΩ/m @ 10MHz		

# **ELECTRICAL PERFORMANCE**

Frequency (MHz)		1	4	10	20	100	200	250	500	550
Insertion Loss (dB/100m)	Standard (Max)	2.1	3.8	6.0	8.5	19.9	29.1	33.0	N/A	N/A
	Typical	1.9	3.5	5.5	7.8	18.0	26.1	29.4	43.0	45.4
NEXT (dB)	Standard (Min)	66.0	65.3	59.3	54.8	44.3	39.8	38.3	N/A	N/A
, ,	Typical	100.0	100.0	100.0	100.0	94.3	88.9	87.1	81.7	81.0
PSNEXT (dB)	Standard (Min)	64.0	63.3	57.3	52.8	42.3	37.8	36.3	N/A	N/A
	Typical	97.0	97.0	97.0	97.0	91.3	85.9	84.1	78.7	78.0
ACR-F (dB)	Standard (Min)	66.0	58.0	50.0	44.0	30.0	24.0	22.0	N/A	N/A
, ,	Typical	90.0	90.0	90.0	84.8	70.8	64.8	62.8	56.8	56.0
PSACR-F (dB)	Standard (Min)	64.0	55.0	47.0	41.0	27.0	21.0	19.0	N/A	N/A
	Typical	87.0	87.0	87.0	81.8	67.8	61.8	59.8	53.8	53.0
Return Loss (dB)	Standard (Min)	N/A	23.0	25.0	25.0	20.1	18.0	17.3	N/A	N/A
	Typical	27.0	30.0	30.0	30.0	25.1	23.0	22.3	20.2	19.9

<sup>•</sup> The standard values shown are the most demanding taken from the relevant IEC, TIA and EN specifications. These standard values are the maximum permittable for Insertion loss and the minimum permittable for other parameters

<sup>•</sup> N/A – Not Applicable

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## **STANDARD PACKAGING SPECIFICATIONS**

Part Number		kaging th (m)	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange x Width (mm)	Gross Weight (kg/ltem)	Items Per Pallet
C6S/FTP-B2ca-5000	R 5	00	Orange	7.0	48.4	400 x 390	26.7	12

## **COUNTRY OF ORIGIN**

**COO:** United Kingdom

"Leviton is **dedicated** to **designing**, **developing** and **manufacturing** sustainable **high-performance** structured cabling and specialty **cabling solutions**."

The information contained in this document is valid and correct at the time of issue. Leviton reserves the right to modify details without notice in light of subsequent standard/specification changes and ongoing technical developments.