# **Category 6A F/FTP EuroClass Cca Cables**

Datasheet: GD103266v11



#### **APPLICATION**

Leviton Category 6A F/FTP cables exceed Category 6A performance standards. They are rated to 500MHz and are suitable for use in all Class E<sub>A</sub> structured wiring cable systems. The applications supported include 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet, and broadband video transmissions at frequencies as high as 500MHz.

#### **FEATURES AND BENEFITS**

- 23 AWG solid annealed copper wire
- 4 twisted pairs individually screened and cabled together providing EMI immunity
- Overall aluminum polyester screen for improved shielding efficiency and increased heat dissipation
- Designed to support all Class EA protocols including 10GBASE-T
- Enhanced HFFR-LS\* material meets the requirements of the Construction Products Regulation (CPR) EuroClass Cca
- Green jacket to identify EuroClass level Cca
- 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<sub>A</sub>, IEC 61156-5
  - EN50173-1 and EN 50288-10-1
  - ANSI/TIA 568.2-D
- Supports 10GBASE-T and meets the design requirements of 802.11ac wireless. Recommended for PoE standards:
  - IEEE 802.3bt PoE Type 1 (15.4 Watts) formerly 802.3af
  - IEEE 802.3bt PoE Type 2 (30 Watts) formerly 802.3at
  - IEEE 802.3bt PoE Type 3 (60 Watts)
  - IEEE 802.3bt PoE Type 4 (90 Watts)
  - Cisco UPoE (60 Watts), Cisco UPoE+ (90 Watts) and Power over HDBaseT<sup>™</sup> PoH (95 Watts)

#### **REACTION TO FIRE**

CHARACTERISTIC	STANDARD	RATING		
Single Cable Flame Rating	IEC 60332-1-2	Pass		
Bundled Cable Flame Rating	EN 50399 20.5kW source	Cca		
Smoke Production	EN 50399 & EN61034-2	s1a		
Flaming Droplets/Particles	EN 50399	d1		
Acid Gas Emission/Acidity	EN 50267-2-3	a1		
Classification/EuroClass	EN 13501-6	Cca s1a d1 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 1b	84dB			
Transfer Impedance	Grade 2	11mΩ/m @ 10MHz			

#### **ELECTRICAL PERFORMANCE**

Frequency (MHz)		1	4	10	20	100	200	250	500	550
11561 (1011 2033	Standard	2.1	3.8	5.9	8.4	19.1	27.6	31.1	45.3	N/A
	Typical	1.9	3.5	5.5	7.8	18.0	26.1	29.4	43.0	45.4
21777 ( 17)	Standard	75.3	66.3	60.3	55.8	45.3	40.8	39.3	34.8	N/A
NEXT (dB)	Typical	100.0	100.0	100.0	100.0	94.3	88.9	87.1	81.7	81.0
	Standard	72.3	63.3	57.3	52.8	42.3	37.8	36.3	31.8	N/A
PSNEXT (dB)	Typical	97.0	97.0	97.0	97.0	91.3	85.9	84.1	78.7	78.0
4.CD = / ID)	Standard	68.0	56.0	48.0	42.0	28.0	22.0	20.0	14.0	N/A
ACR-F (dB)	Typical	90.0	90.0	90.0	84.8	70.8	64.8	62.8	56.8	56.0
PSACR-F (dB)	Standard	65.0	53.0	45.0	39.0	25.0	19.0	17.0	11.0	N/A
	Typical	87.0	87.0	87.0	81.8	67.8	61.8	59.8	53.8	53.0
	Standard	20.0	23.0	25.0	25.0	20.1	18.0	17.3	17.3	N/A
Return Loss (dB)	Typical	27.0	30.0	30.0	30.0	25.1	23.0	22.3	20.2	19.9
PSANEXT (dB)	Standard	67.0	67.0	67.0	67.0	62.5	58.0	56.5	52.0	N/A
	Typical	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PSAACR-F (dB)	Standard	67.0	66.2	58.2	52.2	38.2	32.2	30.2	24.2	N/A
	Typical	98.1	96.5	94.5	92.2	82.0	73.9	70.6	57.0	54.6

<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

## **INSTALLATION**

Temperature (Installation)	0°C to +50°C		
Temperature (Operation)	-20°C to +75°C		
Max Tensile Load (Installation)	10kg		
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		

<sup>•</sup> N/A – Not Applicable

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### STANDARD PACKAGING SPECIFICATIONS

Part Number	Packaging Length (m)	Color	Cable Cable Diameter Weight Di		Reel Size Flange Diameter x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
AC6F/FTP-Cca-500GN	500	Green+	7.0	50.2	400 x 390	27.5	12
AC6F/FTP-Cca-1000GN	1000	Green+	7.0	50.2	600 x 325	55.9	6
AC6F/FTP-Cca-D500GN+	500	Green+	14.3 x 7.1	102.4	600 x 325	57.7	6

<sup>†</sup>Also available in a range of non-standard colors

#### **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.

<sup>†† &#</sup>x27;D' denotes Duplex Cable