

# Category 7 S/FTP EuroClass B2ca Cables

Datasheet: GD103455v11



## APPLICATION

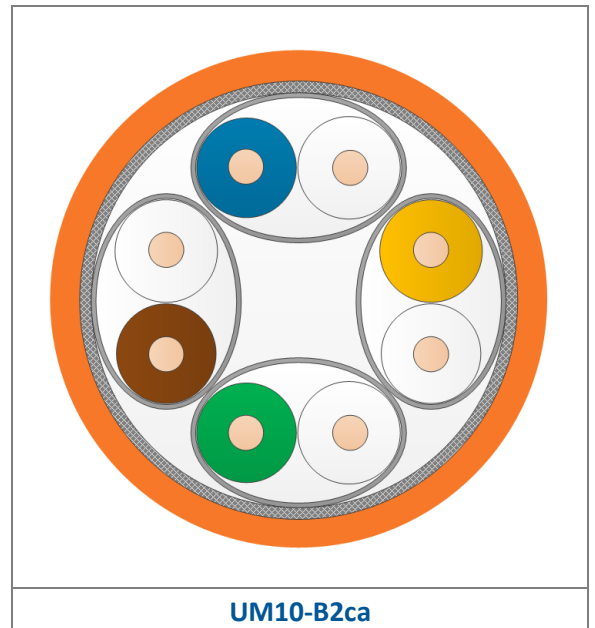
Leviton Category 7 S/FTP cables exceed Category 7 performance standards. They are specified to 600MHz and rated to 1000MHz and are suitable for use in all Class F structured wiring cable systems. The applications supported include 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet, and broadband video transmissions at frequencies up to 600MHz.

## 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 F protocols including 10GBASE-T
- Enhanced HFFR-LS\* material enables the cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass B2ca
- Orange† 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

\* Halogen Free Flame Retardant – Low Smoke

† Also available in a range of non-standard colors



## STANDARDS

- Designed and constructed to give optimal electrical performance to the following standards:
  - ISO/IEC 11801 Class F, IEC 61156-5
  - EN50173-1 and EN 50288-4-1
- 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)
  - Cisco UPoE (60 Watts), Cisco UPoE+ (90 Watts) and Power over HDBaseT™ PoH (95 Watts)

## REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING
IEC 60332 Cable Flame Rating	IEC 60332-1-2	Pass
	IEC 60332-3-24	Pass
Smoke Production	EN 61034	Pass
Acid Gas Emission/Acidity	EN 50267-2-3	Pass
Classification / EuroClass	EN 13501-6	B2ca s1a d0 a1

# Category 7 S/FTP EuroClass B2ca Cables

Datasheet: GD103455v11



## 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 25nsec/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	100	200	250	500	600	1000
Insertion Loss (dB/100m)	Standard (Max)	2.0	3.6	5.7	18.5	26.8	30.2	44.1	48.9	N/A
	<b>Typical</b>	<b>1.9</b>	<b>3.5</b>	<b>5.5</b>	<b>18.0</b>	<b>26.1</b>	<b>29.4</b>	<b>43.0</b>	<b>47.6</b>	<b>63.8</b>
NEXT (dB)	Standard (Min)	80.0	80.0	80.0	72.4	67.9	66.5	61.9	60.8	N/A
	<b>Typical</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>94.3</b>	<b>88.9</b>	<b>87.1</b>	<b>81.7</b>	<b>80.3</b>	<b>76.3</b>
PSNEXT (dB)	Standard (Min)	77.0	77.0	77.0	69.4	64.9	63.5	58.9	57.8	N/A
	<b>Typical</b>	<b>97.0</b>	<b>97.0</b>	<b>97.0</b>	<b>91.3</b>	<b>85.9</b>	<b>84.1</b>	<b>78.7</b>	<b>77.3</b>	<b>73.3</b>
ACR-F (dB)	Standard (Min)	80.0	80.0	74.0	54.0	48.0	46.0	40.0	38.4	N/A
	<b>Typical</b>	<b>90.0</b>	<b>90.0</b>	<b>90.0</b>	<b>70.8</b>	<b>64.8</b>	<b>62.8</b>	<b>56.8</b>	<b>55.2</b>	<b>50.8</b>
PSACR-F (dB)	Standard (Min)	77.0	77.0	71.0	51.0	45.0	43.0	37.0	35.4	N/A
	<b>Typical</b>	<b>87.0</b>	<b>87.0</b>	<b>87.0</b>	<b>67.8</b>	<b>61.8</b>	<b>59.8</b>	<b>53.8</b>	<b>52.2</b>	<b>47.8</b>
Return Loss (dB)	Standard (Min)	N/A	23.0	25.0	20.1	18.0	17.3	17.3	18.3	N/A
	<b>Typical</b>	<b>27.0</b>	<b>30.0</b>	<b>30.0</b>	<b>25.1</b>	<b>23.0</b>	<b>22.3</b>	<b>20.2</b>	<b>19.7</b>	<b>18.1</b>
PSANEXT (dB)	<b>Typical</b>	<b>98.1</b>	<b>96.5</b>	<b>94.5</b>	<b>76.3</b>	<b>62.8</b>	<b>57.7</b>	<b>38.7</b>	<b>32.6</b>	<b>12.5</b>
PSAACR-F (dB)	<b>Typical</b>	<b>95.1</b>	<b>93.5</b>	<b>91.5</b>	<b>73.3</b>	<b>59.8</b>	<b>54.7</b>	<b>35.7</b>	<b>29.6</b>	<b>9.5</b>

## INSTALLATION

Temperature (Installation)	0°C to +50°C	Min Bend Radius (Installation)	8 x Outer Diameter
Temperature (Operation)	-20°C to +75°C	Min Bend Radius (Operation)	4 x Outer Diameter
Max Tensile Load (Installation)	10kg	Field Test NVP Value	0.80
Segregation Class	Class D		

# Category 7 S/FTP EuroClass B2ca Cables

Datasheet: GD103455v11



## STANDARD PACKAGING SPECIFICATIONS

Part Number	Packaging Length (m)	Color	Nominal Cable Dimensions (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
UM10-B2ca-500OR	500	Orange†	7.2	53.7	400 x 390	29.4	12
UM10-B2ca-1000OR	1000	Orange†	7.2	53.7	600 x 405	60.3	4

† 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.