

Category 7 S/FTP EuroClass B2ca Cables

Datasheet: GD103455v5



APPLICATION

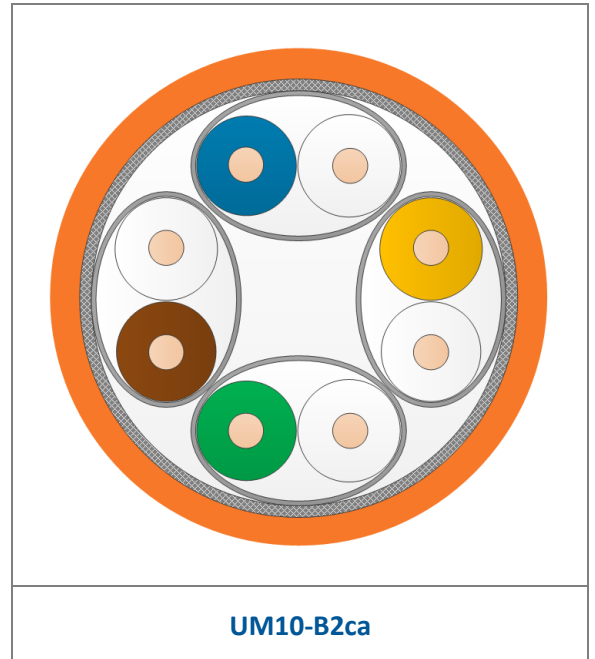
Leviton Category 7 S/FTP cables exceed Category 7 performance standards. They are specified to 600MHz and rated to 1000MHz and are suitable for use in all Class F structured wiring cable systems. The applications supported include 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet, and broadband 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
 - ANSI/TIA 568C.2
- Recommended for PoE standards: IEEE 802.3af, 802.3at, 802.3bt, Cisco UPoE, and Power over HDBaseT™ up to 100 watts

REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING
Single Cable Flame Rating	IEC 60332-1-2	Pass
Smoke Production	EN 61034	Pass
Acid Gas Emission/Acidity	EN 50267-2-3	Pass
Classification	EN 13501-6	B2ca s1a d1 a1

Category 7 S/FTP EuroClass B2ca Cables

Datasheet: GD103455v5



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

INSTALLATION

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

Category 7 S/FTP EuroClass B2ca Cables

Datasheet: GD103455v5



PRINT LEGEND

Example print legend:

[Length Mark]m BRAND-REX a LEVITON company UM10-B2ca Cat 7 S/FTP EN 50399 EuroClass B2ca s1a d1 a1 NVP 0.80
MADE IN UK [ID number] [Week/Year]

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
UM10-B2ca-D500OR††	500	Orange†	7.2 x 14.6	107.6	600 x 405	60.3	4

† Also available in a range of non-standard colors

†† Duplex cable

*“Leviton is **dedicated to designing, developing and manufacturing** sustainable **high performance** structured cabling and speciality **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.