

Category 7A S/FTP EuroClass C_{ca} Cables

Datasheet: GD103676v3

Brand-Rex a LEVITON company

APPLICATION

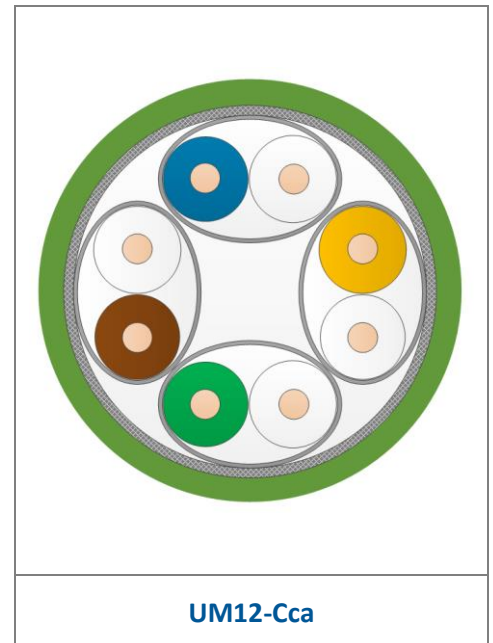
Brand-Rex UM12 cables exceed the Category 7A performance standards. They are specified to 1000MHz and rated to 1200MHz and are suitable for use in all Class FA structured wiring cable systems. The applications supported include 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet and broadband video transmissions at frequencies up to 1000MHz.

FEATURES AND BENEFITS

- 22 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
- Green[†] HFFR-LS* material enables cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass C_{ca}
- Included in the Leviton and Brand-Rex 25 Year System Warranties when used in conjunction with Leviton or Brand-Rex copper connectivity. System warranties available for qualified projects installed by certified contractors.
- Designed and manufactured in a carbon neutral facility in the UK
- Delivered in 100% recyclable packaging

* Halogen Free Flame Retardant – Low Smoke

[†] Also available in a range of non-standard colours



STANDARDS

- Designed and constructed to give optimum electrical performance to the following standards:
 - ISO/IEC 11801 Class FA, IEC 61156-5
 - EN50173-1 and EN 50288-9-1
 - ANSI/TIA 568C.2
- Supports 10GBASE-T
- Meets the design requirements of 802.11ac wireless
- Recommended for PoE standards: IEEE 802.3af, 802.3at, Cisco UPoE, and Power over HDBaseT™ (PoH) up to 100 watts, as well as emerging 4 pair PoE standards such as the IEEE 802.3bt, including 90 watts at the powered device (PD)

REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING
Flammability Rating	IEC/EN 60332-3-24	Pass
Smoke Production	EN 61034	Pass
Acid Gas Emission / Acidity	EN 50267-2-3	Pass
Classification	EN 13501-6	C _{ca} s1a d1 a1
Calorific Value	EN ISO 1716:2010	502 kJ/m

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PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Conductor Loop Resistance	Max 19 Ω / 100m	12Ω / 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	7mΩ/m @ 10MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	100	250	500	600	1000	1200
Insertion Loss (dB/100m)	Standard	na	3.7	5.8	18.5	29.7	42.8	47.1	61.9	na
	Typical	1.9	3.4	5.3	16.7	26.9	38.7	42.7	56.2	62.1
NEXT (dB)	Standard	78.0	78.0	78.0	75.4	69.4	64.9	63.7	60.4	na
	Typical	100.0	100.0	100.0	100.0	97.2	91.8	90.4	86.4	85.0
PSNEXT (dB)	Standard	75.0	75.0	75.0	72.4	66.4	61.9	60.7	57.4	na
	Typical	90.0	90.0	90.0	90.0	88.0	83.5	82.3	79.0	77.8
ACR-F (dB)	Standard	78.0	78.0	78.0	65.3	57.3	51.3	49.7	45.3	na
	Typical	100.0	99.0	91.0	71.0	63.0	57.0	55.4	51.0	49.4
PSACR-F (dB)	Standard	75.0	75.0	75.0	62.3	54.3	48.3	46.7	42.3	na
	Typical	90.0	90.0	84.5	64.5	56.5	50.5	48.9	44.5	42.9
Return Loss (dB)	Standard	na	23.0	25.0	20.1	17.3	17.3	17.3	15.1	na
	Typical	30.0	33.0	36.0	35.1	32.3	31.3	30.5	28.3	27.5
ACR (dB)	Typical	98.1	96.6	94.7	83.3	70.4	53.1	47.7	30.2	22.8
PSACR (dB)	Typical	88.1	86.6	84.7	73.3	61.2	44.8	39.6	22.8	15.7

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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 per simplex cable	Field Test NVP Value	0.80
Segregation Class	Class D		

PRINT LEGEND

Example print legend:

[Length Mark]m BRAND-REX a LEVITON company UM12-Cca Cat 7A S/FTP EN 50399 EuroClass Cca s1a d1 a1 NVP 0.80
MADE IN UK [ID number] [Week/Year]

STANDARD PACKAGING SPECIFICATIONS

Brand-Rex Part Number	Package Length (m)	Colour	Nominal Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
UM12-Cca-500GN [†]	500	Green [†]	7.2	61.5	400 x 390	33.2	12
UM12-Cca-1000GN [‡]	1000	Green [†]	7.2	61.5	600 x 405	68.0	4

[†] Also available in a range of non-standard colours

*“Brand-Rex 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. Brand-Rex reserves the right to modify details without notice in light of subsequent standard/specification changes and ongoing technical developments.