

Category 7 S/FTP EuroClass D_{ca} Cables

Datasheet: GD103591v3

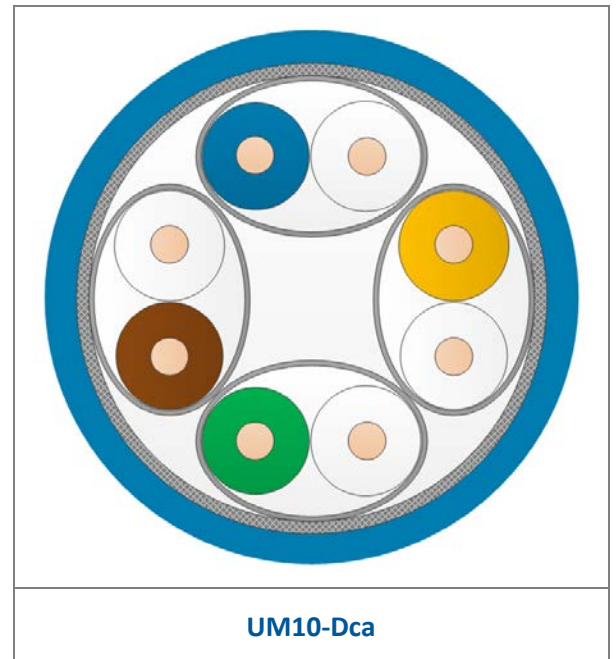
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APPLICATION

The Brand-Rex U-MediaPlus UM10 cables exceed the 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
- Supports Power over Ethernet (PoE) and Power over Ethernet Plus (PoE+) applications
- HFFR-LS* material enables the cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass D_{ca}
- Blue† coloured jacket to identify EuroClass level D_{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.



* Halogen Free Flame Retardant – Low Smoke

† Also available in a range of non-standard colours

STANDARDS

Applicable Cable Standards: IEC 61156-5 and EN50288-4-1

REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING	DUPLEX RATING
Single Cable Flame Rating	IEC/EN 60332-1-2	Pass	Pass
Smoke Production	EN 61034	n/a	s1a
Acid Gas Emission / Acidity	EN 50267-2-3	Pass	Pass
Classification	EN 13501-6	D _{ca} s1 d1 a1	D _{ca} s1a d1 a1

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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 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	na
	<i>Typical</i>	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	na
	<i>Typical</i>	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	na
	<i>Typical</i>	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	na
	<i>Typical</i>	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	na
	<i>Typical</i>	87.0	87.0	87.0	67.8	61.8	59.8	53.8	52.2	47.8
Return Loss (dB)	Standard	Na	23.0	25.0	20.1	18.0	17.3	17.3	18.3	na
	<i>Typical</i>	27.0	30.0	30.0	25.1	23.0	22.3	20.2	19.7	18.1
ACR (dB/100m)	<i>Typical</i>	98.1	96.5	94.5	76.3	62.8	57.7	38.7	32.6	12.5
PSACR (dB/100m)	<i>Typical</i>	95.1	93.5	91.5	73.3	59.8	54.7	35.7	29.6	9.5

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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 UM10-Dca Cat 7 S/FTP EN 50399 EuroClass Dca s1 d1 a1 NVP 0.80
MADE IN UK [ID number] [Week/Year]

STANDARD PACKAGING SPECIFICATIONS

Brand-Rex Part Number	Packaging Length (m)	Colour	Nominal Cable Dimension (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
UM10-Dca-500BU	500	Blue†	7.0	49.5	400 x 390	27.2	12
UM10-Dca-1000BU	1000	Blue †	7.0	49.5	600 x 325	55.5	4
UM10-Dca-D500BU ††	500	Blue†	7.1 x 14.4	102.2	600 x 325	57.6	4

† Also available in a range of non-standard colours

†† Duplex Cable

*“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.