

Category 6 UTP EuroClass C_{ca} Cables

Datasheet: GD103704v1

Brand-Rex | a **LEVITON** company

APPLICATION

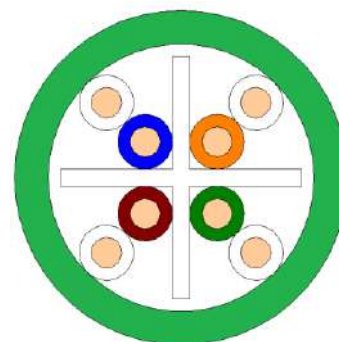
Brand-Rex Cat6Plus C6U cables exceed the Category 6 performance standards. They are rated to 250MHz and are suitable for use in all Class E structured wiring cable systems. The Cat6Plus C6U cable supports Gigabit Ethernet, PoE, PoE+, voice and broadband video transmissions at frequencies up to 250MHz.

FEATURES AND BENEFITS

- 23 AWG solid annealed copper wire
- Polyolefin core insulation
- Central cross filler – for increased internal crosstalk performance
- 4 unshielded twisted pairs cabled together
- Designed to support all class E protocols including Gigabit Ethernet
- 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 C_{ca}
- Green† coloured jacket to identify Euroclass level C_{ca}

* Halogen Free Flame Retardant – Low Smoke

† Also available in a range of non-standard colours



Cat6Plus C6UR-Cca

STANDARDS

Applicable Cable Standards: ISO/IEC 11801 Class E, IEC 61156-5 & ANSI/TIA-568-C.2

REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING
Single Cable Flame Rating	IEC/EN 60332-1-2	Pass
Smoke Production	EN 61034	Pass
Acid Gas Emission / Acidity	EN 50267-2-3	Pass
Reaction to Fire Classification	EN 13501-6	C _{ca} s1a d1 a1

PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION
Conductor Loop Resistance	Max 19 Ω / 100m
Conductor Resistance Unbalance	Max 2%
Insulation Resistance	>5G Ω .km
Dielectric Strength	1000 Vdc / 1 min

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SECONDARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION
Velocity of Propagation	<538nsec/100m @ 100MHz
Delay Skew	Max 45nsec/100m @100MHz
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	20	100	200	250
Insertion Loss (dB/100m)	Standard	2.0	3.8	6.0	8.5	19.8	29.0	32.8
NEXT (dB)	Standard	74.3	65.3	59.3	54.8	44.3	39.8	38.3
PSNEXT (dB)	Standard	72.3	63.3	57.3	52.8	42.3	37.8	36.3
ACR-F (dB)	Standard	67.8	55.8	47.8	41.8	27.8	21.8	19.8
PSACR-F (dB)	Standard	64.8	52.8	44.8	38.8	24.8	18.8	16.8
Return loss (dB)	Standard	20.0	23.0	25.0	25.0	20.1	18.0	17.3

INSTALLATION

Temperature (Installation)	0°C to +50°C	Min Bend Radius (Installation)	8 x Outer Diameter
Temperature (Operation)	-20°C to +60°C	Min Bend Radius (Operation)	4 x Outer Diameter
Max Tensile Load (Installation)	10kg per simplex cable	Field Test NVP Value	0.67
Segregation Class	Class B		

PRINT LEGEND

Example print legend:

[Length Mark]m BRAND-REX a LEVITON company C6UR-Cca Cat 6 U/UTP EN 50399 EuroClass Cca s1a d1 a1
NVP 0.67 HCA026 [ID number] [Week/Year]

STANDARD PACKAGING SPECIFICATIONS – REEL IN BOX

Brand-Rex Part Number	Packaging Length (m)	Colour	Nominal Cable Diameter (mm)
C6UR-C _{ca} -RIB-305GN	305	Green†	6.1

†Also available in a range of non-standard colours

DECLARATION OF PERFORMANCE**DoP No. 0122**

Annex III Construction Product Regulation (EU) No 305/2011.

For the Construction product: Communication cables

1. Unique identification code of the product-type

C6UR- Cca
Cat 6 U/UTP-Cca

2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):

As per Product Label

3. Intended use or uses of the construction product

Supply of communications in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke.

4. Contact address of the manufacturer
According to Article 11(5):Brand-Rex Ltd, Viewfield Industrial Estate, Glenrothes
Fife, KY6 2RS, Scotland, UK
Tel: +441592772124 Fax: +441592775314
Email: support@brand-rex.com5. Contact address of authorized representative:
According to Article 12(2):

HCA026

6. System of assessment and verification of constancy of performance of the construction product as set out in CPR EU No.305/2011 Annex V.

System 1+

7. Notified product certification body

NB0200

Performed the determination of product type, the initial inspection of the manufacturing plant and of FPC, the continuous surveillance, assessment and evaluation of the FPC and the audit testing of samples taken before placing the product on the market and issued the constancy of performance.

8. Declared performance

Essential characteristics	Performance	Harmonized technical standard
Reaction to fire	Cca-s1a,d1,a1	EN 50575: 2014 +A1: 2016
Release of dangerous substances	None	

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Ian Wilkie , Managing Director

(Name and function)

Glenrothes, 23rd August 2017

(Place and date of issue)


(Signed or on behalf of)