Category 6_A U/UTP EuroClass C_{ca} Cables

Datasheet: GD103819v8



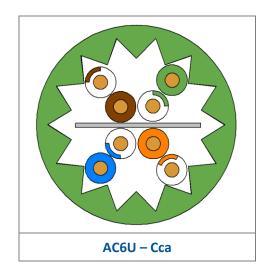
APPLICATION

Brand-Rex AC6U cables exceed the Category 6A performance standards. They are rated to 500MHz and are suitable for use in all Class EA structured wiring cable systems.

The U/UTP cable construction combines superior levels of pair balance with an innovative jacket profile specially designed to reduce alien crosstalk. The AC6U cable supports 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet, voice and broadband video transmissions at frequencies up to 500MHz.

FEATURES AND BENEFITS

- 23 AWG solid annealed copper wire
- 4 unshielded twisted pairs cabled together
- Central separator for excellent internal crosstalk performance
- Available in CPR fire performance ratings Cca and B2ca and colour coded for identification
- 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



STANDARDS

- Designed and constructed to give optimal electrical performance to the following standards:
 - ISO/IEC 11801 Class E_A, IEC 61156-5
 - EN 50173-1 and EN 50288-11-1
 - 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)

FIRE CLASSIFICATION

CHARACTERISTIC	IEC STANDARD	EN STANDARD	CPR RATING	
Reaction to Fire Classification / EuroClass	-	EN 13501-6	Cca s1a d1 a1	
Single Cable Flame Rating	IEC 60332-1-2	EN 60332-1-2	Pass	
Smoke Emission	IEC 61034	EN 61034	Pass	
Acid Gas Emission	IEC 60754	EN 60754	Pass	

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PRIMARY ELECTRICAL PARAMETERS

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

SECONDARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION		
Velocity of Propagation	<538nsec/100m @ 100MHz		
Delay Skew	Max 45nsec/100m @ 100MHz		
Characteristic Impedance (fitted)	100Ω +/- 15Ω		

ELECTRICAL PERFORMANCE

Frequency (MHz)	1	4	10	20	100	200	250	500
Insertion Loss (dB/100m) max.	2.1	3.8	5.9	8.4	19.1	27.6	31.1	45.3
NEXT (dB) min.	74.3	65.3	59.3	54.8	44.3	39.8	38.3	33.8
PSNEXT (dB) min.	72.3	63.3	57.3	52.8	42.3	37.8	36.3	31.8
ACR-F (dB) min.	67.8	55.8	47.8	41.8	27.8	21.8	19.8	13.8
PS ACR-F (dB) min.	64.8	52.8	44.8	38.8	24.8	18.8	16.8	10.8
Return Loss (dB) min.	20.0	23.0	25.0	25.0	20.1	18.0	17.3	15.2
PSANEXT (dB) min.	67.0	67.0	67.0	67.0	62.5	58.0	56.5	52.0
PSAACR-F (dB) min.	67.0	66.2	58.2	52.2	38.2	32.2	30.2	24.2

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
Segregation Class	Class C	Field Test NVP Value	0.67

PRINT LEGEND

Example print legend:

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

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STANDARD PACKAGING SPECIFICATIONS - REELS

Brand-Rex Part Number	Packaging Length (m)	Colour	Nominal Diameter (mm)	Nominal Weight (kg/km)	Reel Size Flange Dia x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
AC6U-Cca-500GN1	500	Green+	7.9	65	400 x 410	35.3	12

[†] 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.