

Category 6A U/UTP EuroClass B2ca Cables

Datasheet: GD105151v4



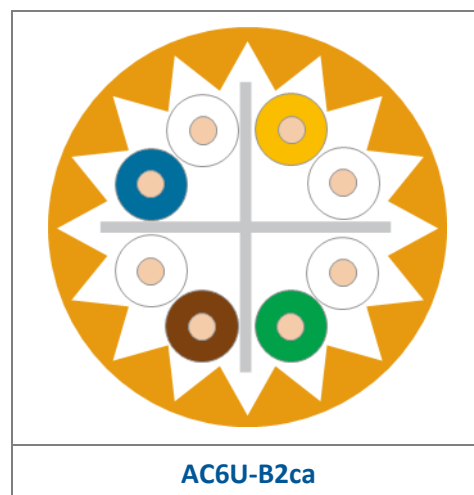
APPLICATION

Leviton Category 6A U/UTP 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. Category 6A U/UTP cables support 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
- HFFR-LS* jacket enables the cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass 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



STANDARDS

- Designed and constructed to give optimal electrical performance to the following standards:
 - ISO/IEC 11801 Class EA, IEC 61156-5
 - EN 50173-1 and EN 50288-11-1
 - ANSI/TIA 568.2-D
- Supports 10GBASE-T
- Meets the design requirements of 802.11ac wireless
- Recommended for PoE standards:
 - IEEE 802.3bt PoE Type 1 (15.4 Watts) formerly 802.3af
 - IEEE 802.3bt PoE Type 2 (30 Watts) formerly 802.3at
 - IEEE 802.3bt PoE Type 3 (60 Watts)
 - IEEE 802.3bt PoE Type 4 (100 Watts)
 - Cisco UPoE (60 Watts)
 - Cisco UPoE+ (90 Watts)
 - Power over HDBaseT™ PoH (95 Watts)

REACTION TO FIRE

CHARACTERISTIC	IEC STANDARD	EN STANDARD	CPR RATING
Classification / EuroClass	-	EN 13501-6	B2ca-s1a, d0, a1
Single Cable Flame Rating	IEC 60332-1-2	EN 60332-1-2	Pass

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PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION
Conductor Loop Resistance	Max 19 Ω /100m
Conductor Resistance Unbalance	Max 2%
Insulation Resistance	>5G Ω .km
Dielectric Strength	2500 Vdc/2secs

SECONDARY ELECTRICAL PARAMETERS

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

ELECTRICAL PERFORMANCE

Frequency (MHz)		4	10	20	100	200	250	500
Insertion Loss (dB/100m)	Standard (Max)	3.8	5.9	8.4	19.1	27.6	31.1	45.3
	<i>Typical</i>	3.8	5.8	7.9	18.1	26.0	29.4	42.7
NEXT (dB)	Standard (Min)	65.3	59.3	54.8	44.3	39.8	38.3	33.8
	<i>Typical</i>	92.2	86.5	82.0	71.8	67.3	65.5	56.0
PSNEXT (dB)	Standard (Min)	63.3	57.3	52.8	42.3	37.8	36.3	31.8
	<i>Typical</i>	83.7	78.8	73.7	63.8	60.0	58.4	48.7
ACR-F (dB)	Standard (Min)	55.8	47.8	41.8	27.8	21.8	19.8	13.8
	<i>Typical</i>	83.1	75.3	69.0	54.8	48.2	45.8	38.3
PSACR-F (dB)	Standard (Min)	52.8	44.8	38.8	24.8	18.8	16.8	10.8
	<i>Typical</i>	75.5	68.0	62.0	47.6	41.3	39.2	31.5
Return Loss (dB)	Standard (Min)	23.0	25.0	25.0	20.1	18.0	17.3	15.2
	<i>Typical</i>	34.4	35.5	36.3	36.3	36.2	34.1	29.7
PSANEXT (dB)	Standard (Min)	67.0	67.0	67.0	62.5	58.0	56.5	52.0
	<i>Typical</i>	84.4	79.4	76.1	69.9	68.5	68.1	61.5
PSAACR-F (dB)	Standard (Min)	66.2	58.2	52.2	38.2	32.2	30.2	24.2
	<i>Typical</i>	72.4	64.9	58.8	44.9	38.8	37.1	29.4

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INSTALLATION

Temperature (Installation)	0°C to +50°C
Temperature (Operation)	-20°C to +60°C
Segregation Class	Class C

Min Bend Radius (Installation)	8 x Outer Diameter
Min Bend Radius (Operation)	4 x Outer Diameter
Field Test NVP Value	0.69

STANDARD PACKAGING SPECIFICATIONS - REELS

Part Number	Packaging Length (m)	Color	Nominal Diameter (mm)	Nominal Weight (kg/km)	Reel Size Flange Dia x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
AC6U-B2ca-305OR2	305	Orange	7.9	67.6	400 x 300	22.6	18
AC6U-B2ca-500OR2	500	Orange	7.9	67.6	465 x 375	37	6

COUNTRY OF ORIGIN

COO: United Kingdom

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