Category 6 U/UTP 24AWG EuroClass Eca Cables
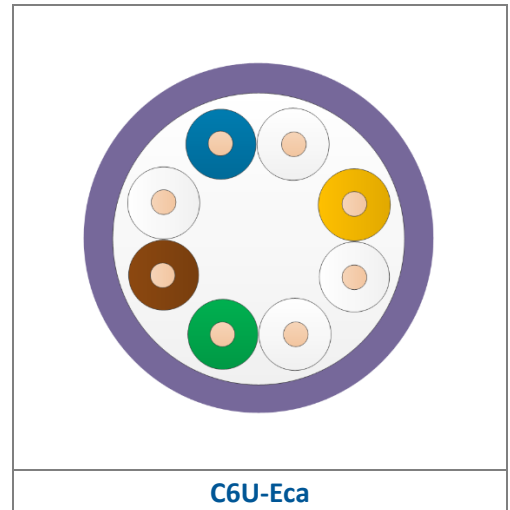
Datasheet: GD104824v5

LEVITON

APPLICATION

Leviton's Category 6 U/UTP 24AWG cables meet Category 6 performance standards. They are rated to 250MHz and are suitable for use in all Class E structured wiring cable systems. This cable supports Gigabit Ethernet, Power over Ethernet, voice, and broadband video transmissions at frequencies up to 250MHz.

FEATURES AND BENEFITS

- 24 AWG solid annealed copper wire
- Polyolefin core Insulation
- 4 unshielded twisted pairs cabled together
- Designed to support all class E protocols including Gigabit Ethernet
- HFFR-LS* jacket enables the cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass Eca
- Included in the Leviton 25-Year System Warranty when used in conjunction with Leviton copper connectivity. System warranties are available for qualified projects installed by certified contractors
- Reel and box packaging is 100% recyclable

* Halogen Free Flame Retardant – Low Smoke

C6U-Eca

STANDARDS

- Designed and constructed to give optimum electrical performance to the following standards:
    - ISO/IEC 11801 Class E, IEC 61156-5
    - EN50173-1 and EN 50288-6-1
    - ANSI/TIA 568.2-D
- Supports Gigabit Ethernet
- 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 (90 Watts)
    - Cisco UPoE (60 Watts)
    - Cisco UPoE+ (90 Watts)
    - Power over HDBaseT™ PoH (95 Watts)

REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING
Single Cable Flame Rating	IEC/EN 60332-1-2	Pass
Classification / EuroClass	EN 13501-6	Eca

PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Conductor Loop Resistance	Max 19 Ω / 100m	16 Ω / 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	490nsec/100m @ 100MHz
Delay Skew	Max 45nsec/100m @100MHz	30nsec/100m @ 100MHz
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω ± 3Ω @ 100MHz
Transverse Conversion Loss (TCL)	≥50-10log(f)dB	61dB @ 10MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	20	100	200	250
Insertion Loss (dB/100m)	Standard	2.0	3.8	6.0	8.5	19.9	29.0	32.8
NEXT (dB)	Standard	75.3	66.3	60.3	55.8	45.3	40.8	39.3
PSNEXT (dB)	Standard	72.3	63.3	57.3	52.8	42.3	37.8	36.3
ACR-F (dB)	Standard	67.8	58.0	50.0	44.0	30.0	24.0	22.0
PSACR-F (dB)	Standard	64.8	55.0	47.0	42.0	27.0	21.0	19.0
Return Loss (dB)	Standard	20.0	23.0	25.0	25.0	20.1	18.0	17.3

- *The standard values shown are the most demanding taken from across the relevant IEC, TIA and EN specifications. These standards values are the maximum permittable for Insertion loss and the minimum permittable for other parameters.*

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	**Field Test NVP Value**	0.68	
Segregation Class	Class B			

STANDARD PACKAGING SPECIFICATIONS - REELS

Part Number	Packaging Length (m)	Color	Nominal Cable Diameter *(mm)*	Nominal Cable Weight *(kg/km)*	Reel Size *Flange x width (mm)*	Gross Weight *(kg/Item)*	Items Per Double Pallet
C6U-Eca-500VT4	500	Violet†	5.3	36.5	400 x 320	20.2	36

STANDARD PACKAGING SPECIFICATIONS - BOXES

Part Number	Packaging Length (m)	Color	Nominal Cable Diameter *(mm)*	Nominal Cable Weight *(kg/km)*	Box Size *L x W x H (mm)*	Gross Weight *(kg/Item)*	Items Per Double Pallet
C6U-Eca-B305VT4	305	Violet†	5.3	36.5	405 x 265 x 372	11.7	45

†Also available in a range of non-standard colors

COUNTRY OF ORIGIN

COO: United Kingdom

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*"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.