

Category 6 U/UTP EuroClass Eca Cables

Datasheet: GD102051v12



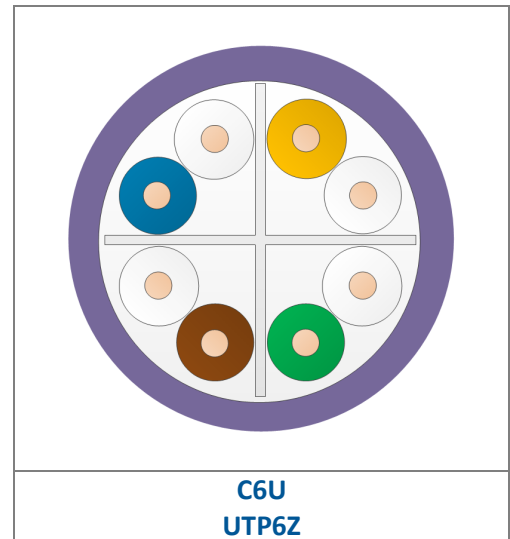
APPLICATION

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

FEATURES AND BENEFITS

- 23 AWG solid annealed copper wire
- 4 unshielded twisted pairs cabled together
- Central separator for increased internal crosstalk performance
- HFFR-LS* jacket enables the cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass Eca
- Included in the Leviton Limited 25-Year System Warranties when used in conjunction with Leviton copper connectivity. System warranties are available for qualified projects installed by certified contractors
- Designed and manufactured in a carbon neutral facility in the UK
- Delivered in 100% recyclable packaging

* Halogen Free Flame Retardant – Low Smoke



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

Material Identifier	HF1
Material Description	Standard HFFR-LS
Flammability Rating	IEC/EN 60332-1-2
Classification / EuroClass	Eca

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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	500	550
Insertion Loss (dB/100m)	Standard	2.1	3.8	6.0	8.5	19.9	29.1	33.0	N/A	N/A
	Typical	1.9	3.5	5.5	7.8	18.0	26.1	29.4	43.0	45.4
NEXT (dB)	Standard	66.0	65.3	59.3	54.8	44.3	39.8	38.3	N/A	N/A
	Typical	86.5	77.5	71.5	67.0	56.5	52.0	50.5	46.0	45.4
PSNEXT (dB)	Standard	64.0	63.3	57.3	52.8	42.3	37.8	36.3	N/A	N/A
	Typical	84.5	75.5	69.5	65.0	54.5	50.0	48.5	44.0	43.4
ACR-F (dB)	Standard	66.0	58.0	50.0	44.0	30.0	24.0	22.0	N/A	N/A
	Typical	85.0	73.0	65.0	59.0	45.0	39.0	37.0	31.0	30.2
PSACR-F (dB)	Standard	64.0	55.0	47.0	41.0	27.0	21.0	19.0	N/A	N/A
	Typical	82.0	70.0	62.0	56.0	42.0	36.0	34.0	28.0	27.2
Return Loss (dB)	Standard	N/A	23.0	25.0	25.0	20.1	18.0	17.3	N/A	N/A
	Typical	27.0	30.0	30.0	30.0	25.1	23.0	22.3	20.2	19.9
ACR (dB)	Typical	84.6	73.9	66.0	59.1	38.5	25.9	21.1	3.0	0.0
PSACR (dB)	Typical	82.6	71.9	64.0	57.1	36.5	23.9	19.1	1.0	-2.0

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	0.69
Segregation Class	Class B		

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STANDARD PACKAGING SPECIFICATIONS - REELS

Part Number	Alternative** Part Number	Packaging Length (m)	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange Diameter x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
C6U-HF1-Eca-500WH	128-UTP6Z-5WS	500	White	5.8	37.5	400 x 310	20.8	18
C6U-HF1-Eca-500VT	129-UTP6Z-5VS	500	Violet	5.8	37.5	400 x 310	20.8	18
C6U-HF1-Eca-1000VT*	-	1000	Violet	5.8	37.5	465 x 390	40.5	6
C6U-HF1-Eca-D500VT*	-	500	Violet	11.6 x 5.8	75.0	465 x 390	40.5	6
C6U-HF1-X-500BK*	-	500	Black	7.0	48.7	400 x 390	26.8	12
C6U-HF1-X-1000BK*	-	1000	Black	7.0	48.7	600 x 405	55.2	4

* Only available in Europe and Middle East regions

** May be ordered using Alternative Part Number in some regions

|| 'D' denotes duplex cable

STANDARD PACKAGING SPECIFICATIONS - BOXES

Part Number	Alternative** 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-HF1-Eca-Rlx-305VT*	125-UTP6Z-MVB ^γ	305	Violet	5.8	37.5	405 x 265 x 405	11.4	27 + 18 [§]
C6U-HF1-Eca-Rlx-305GY*	121-UTP6Z-MSB ^γ	305	Gray	5.8	37.5	405 x 265 x 405	11.4	27 + 18 [§]
C6U-HF1-Eca-Rlx-305WH*	122-UTP6Z-MWB ^γ	305	White	5.8	37.5	405 x 265 x 405	11.4	27 + 18 [§]
C6U-HF1-Eca-Rlx-305BU*	120-UTP6Z-MLB ^γ	305	Blue	5.8	37.5	405 x 265 x 405	11.4	27 + 18 [§]

* Only available in Europe and Middle East regions

** May be ordered using Alternative Part Number in some regions

§ Standard double stacked pallet configuration (lower + upper)

^γ When supplied to Americas – 2 upper pallets are supplied double stacked

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.