

Category 6 U/UTP EuroClass Eca Cables

Datasheet: GD102051v10



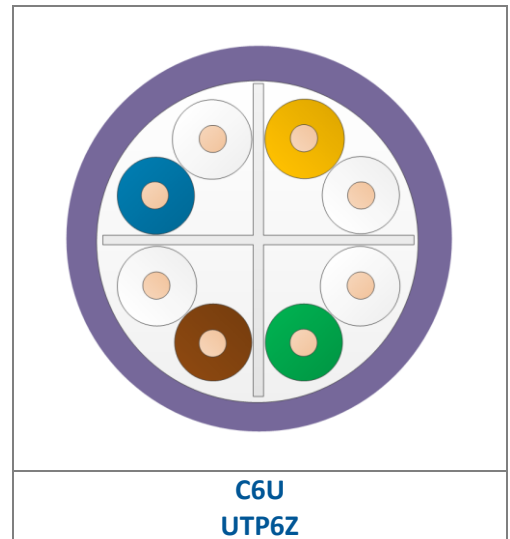
APPLICATION

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* sheath enables 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 568C.2
- Supports Gigabit Ethernet
- Recommended for PoE standards: IEEE 802.3af, 802.3at, 802.3bt, Cisco UPoE, and Power over HDBaseT™ (PoH) up to 100 watts

MATERIAL PERFORMANCE

Material Identifier	HF1
Material Description	Standard HFFR-LS
Flammability Rating	IEC/EN 60332-1-2
Reaction to Fire 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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PRINT LEGEND

Example print legend UTP6Z Parts:

[Length Mark]m LEVITON UTP6Z BRAND-REX C6U-HF1-Eca Cat 6 4 PAIR 23AWG HFFR IEC 60332-1-2 EuroClass Eca NVP 0.69
MADE IN UK [ID number] [Week/Year]

Example print legend C6U Parts:

[Length Mark]m BRAND-REX a LEVITON company C6U-HF1-Eca Cat 6 U/UTP IEC 60332-1-2 EuroClass Eca NVP 0.69 MADE IN UK
[ID number] [Week/Year]

STANDARD PACKAGING SPECIFICATIONS - REELS

Brand-Rex Part Number	Leviton 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-Eca-D1000VT*	-	1000	Violet	11.6 x 5.8	75.0	750 x 410	84.3	2
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

|| 'D' denotes duplex cable

STANDARD PACKAGING SPECIFICATIONS - BOXES

Brand-Rex Part Number	Leviton 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 ^Y	305	Violet	5.8	37.5	405 x 265 x 405	11.4	27 + 18 [§]
C6U-HF1-Eca-Rlx-305GY*	121-UTP6Z-MSB ^Y	305	Grey	5.8	37.5	405 x 265 x 405	11.4	27 + 18 [§]
C6U-HF1-Eca-Rlx-305WH*	122-UTP6Z-MWB ^Y	305	White	5.8	37.5	405 x 265 x 405	11.4	27 + 18 [§]
C6U-HF1-Eca-Rlx-305BU*	120-UTP6Z-MLB ^Y	305	Blue	5.8	37.5	405 x 265 x 405	11.4	27 + 18 [§]

* Only available in Europe and Middle East regions

§ Standard double stacked pallet configuration (lower + upper)

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

*“Leviton 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. Leviton reserves the right to modify details without notice in light of subsequent standard/specification changes and ongoing technical developments.