

## C6FU Cat 6 F/UTP Euroclass Eca Cables

### APPLICATION

Leviton Category 6 F/UTP cables exceed Category 6 performance standards. They are specified to 250MHz and are suitable for use in all Class E structured wiring cable systems. The applications supported include Gigabit Ethernet, Power over Ethernet (PoE), and broadband video transmissions at frequencies up to 250MHz.



### FEATURES & BENEFITS

- 23 AWG solid annealed copper wire
- Polyolefin core insulation
- 4 unshielded twisted pairs cabled together
- Aluminum polyester screen
- Available in a range of jacket materials - to suit a variety of installation environments and color coded for identification
- HFFR-LS (Halogen Free Flame Retardant – Low Smoke) versions meet the requirements of the Construction Products Regulation (CPR) Euroclass Eca
- Reel and box packaging are 100% recyclable

### STANDARDS & REGULATIONS

- ISO/IEC 11801 Class E
- IEC 61156-5
- EN 50173-1
- EN 50288-5-1
- ANSI/TIA 568.2
- IEEE 802.3 PoE Type 1, 2, 3, 4 (100 watts max)
- Cisco UPOE, UPOE+ (90 watts max)
- Power over HDBaseT™ POH (95 watts max)

### COUNTRY OF ORIGIN

UK

### WARRANTY INFORMATION

For Leviton product warranties, go to [Leviton.com/ns/warranty](http://Leviton.com/ns/warranty)

**PRODUCT SPECIFICATIONS**  
**C6FU Cat 6 F/UTP Euroclass Eca Cables**

**INSTALLATION CHARACTERISTICS**

Conductor	23 AWG bare copper
Category	Cat 6
Type of cable	F/UTP
Min. Bend Radius (Installation)	8 x Outer Diameter
Min. Bend Radius (Operational)	4 x Outer Diameter
Max Tensile Load (Installation)	10 kg per simplex cable
Field test NVP value	0.68
Temp. (Installation):	-0 °C to +50 °C (+32 °F to +122 °F)
Temp. (Operating):	-20 °C to +75 °C (-4 °F to +167 °F)
Segregation Class	Class C

**TECHNICAL SPECIFICATIONS**

Primary Electrical Parameters	Specification	Typical Performance
Conductor loop resistance	Max 19 Ω/100 m	15 Ω/100 m
Conductor resistance unbalance	Max. 2 %	0.1 %
Insulation resistance	>5 GΩ · km	>50 GΩ · km
Dielectric strength	2500 V DC for 2 s	Pass
Secondary Electrical Parameters		
Propagation delay	<538 ns/100 m @ 100 MHz	502 ns/100 m @ 100 MHz
Delay skew	Max. 45 ns/100 m @ 100 MHz	23 ns/100 m @ 100 MHz
Mean characteristic impedance	100 Ω ± 5 Ω @ 100 MHz	100 Ω ± 3 Ω @ 100 MHz
Coupling attenuation	Type 1b	80 dB
Transfer impedance	Grade 2	80 mΩ/m @ 10 MHz

**REACTION TO FIRE**

Characteristic	IEC Standard	EN Standard	CPR Rating
Classification / EuroClass	—	EN 13501-6	Eca
Single Cable Flame Rating	IEC 60332-1-2	EN 60332-1-2	Pass

**PRODUCT SPECIFICATIONS**  
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**PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS**

Freq.	IL (dB)		NEXT (dB)		PSNEXT (dB)	
	Standard	Typical	Standard	Typical	Standard	Typical
MHz						
1	2.1	1.9	66.0	80.0	64.0	80.0
4	3.8	3.5	65.3	71.0	63.3	71.0
10	6.0	5.5	59.3	65.0	57.3	65.0
20	8.5	7.8	54.8	60.5	52.8	60.5
100	19.9	18.0	44.3	50.0	42.3	50.0
200	29.1	26.1	39.8	45.5	37.8	45.5
250	33.0	29.4	38.3	44.0	36.3	44.0
500	—	43.0	—	39.5	—	39.5
550	—	45.4	—	38.9	—	38.9

Note: The standard values shown are the most demanding taken from the relevant IEC, TIA and EN specifications.  
 These standard values are the maximum permissible for Insertion loss and the minimum permissible for other parameters

**PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS, CONTINUED**

Freq.	ACRF (dB)		PSACRF (dB)		RL (dB)	
	Standard	Typical	Standard	Typical	Standard	Typical
MHz						
1	66.0	82.0	64.0	79.0	—	27.0
4	58.0	70.0	55.0	67.0	23.0	30.0
10	50.0	62.0	47.0	59.0	25.0	30.0
20	44.0	56.0	41.0	53.0	25.0	30.0
100	30.0	42.0	27.0	39.0	20.1	25.1
200	24.0	36.0	21.0	33.0	18.0	23.0
250	22.0	34.0	19.0	31.0	17.3	22.3
500	—	28.0	—	25.0	—	20.2
550	—	27.2	—	24.2	—	19.9

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**STANDARD PACKAGING SPECIFICATIONS - REELS**

Part Number	Packaging Length (m)	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange Dia. x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
C6F/UTP-HF1-Eca-500WH	500	White	7.1	51.5	400 x 390	28.2	12
C6F/UTP-HF1- Eca-500VT	500	Violet	7.1	51.5	400 x 390	28.2	12
C6F/UTP-HF1- Eca-1000VT*	1000	Violet	7.1	51.5	600 x 405	58.0	4
C6F/UTP-HF1- Eca-D500VT*†	500	Violet	14.3 x 7.1	102.9	600 x 405	58.0	4
C6F/UTP-HF1- Eca-D1000VT**†	1000	Violet	14.3 x 7.1	102.9	750 x 405	112.2	2

\* Only available in Europe and Middle East regions

† 'D' denotes Duplex Cable

**STANDARD PACKAGING SPECIFICATIONS - BOXES**

Part Number	Packaging Length (m)	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Box Size H x W x L (mm)	Gross Weight (kg/Item)	Items Per Pallet
C6F/UTP-HF1-Eca-Rlx-305GY	305	Gray	7.1	54.3	475 x 295 x 475	17.6	12
C6F/UTP-HF1- Eca-Rlx-305VT	305	Violet	7.1	54.3	475 x 295 x 475	17.6	12

For further support information, visit [Leviton.com/ns/support](http://Leviton.com/ns/support)

Page 4 of 4

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