

## C6FU Cat 6 F/UTP Euroclass Dca Cables

### APPLICATION

Cat 6 F/UTP cables exceed Cat 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 250 MHz.



### FEATURES & BENEFITS

- 23 AWG solid annealed copper wire
- 4 unshielded twisted pairs cabled together
- Aluminum polyester screen
- Designed to support all class E protocols including Gigabit Ethernet
- HFFR-LS (Halogen Free Flame Retardant – Low Smoke) material enables the cable to meet the requirements of the Construction Products Regulation (CPR) Euroclass Dca and UL 1666 Riser (CMR)
- 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 Dca 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
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

**HIGH SPEED DATA AND POWER APPLICATIONS**

IEEE 802.3	2.5/5GBASE-T (2.5/5 Gb/s), 1000BASE-T (1 Gb/s), 100BASE-TX (100 Mb/s), 10BASE-T (10 Mb/s)
IEEE 802.3	PoE Types 1, 2, 3, and 4

**TECHNICAL SPECIFICATIONS**

Primary Electrical Parameters	Specification	Typical Performance
Conductor loop resistance	Max 19 Ω/100m	15 Ω/100m
Conductor resistance unbalance	Max. 2%	0.1%
Insulation resistance	>5G Ω.km	>50 GΩ.km
Dielectric strength	2500 Vdc/2secs	Pass
Secondary Electrical Parameters		
Velocity of propagation	<538 nsec/100 m @ 100 MHz	502 nsec/100 m @ 100 MHz
Delay skew	Max. 45 nsec/100 m @ 100 MHz	23 nsec/100 m @ 100 MHz
Mean Characteristic Impedance	100 Ω ± 5 Ω @ 100 MHz	100 Ω ± 3Ω @ 100 MHz
Coupling Attenuation	Type 1b	86 dB
Transfer Impedance	Grade 2	80mΩ/m @ 10MHz

**REACTION TO FIRE**

Characteristic	IEC Standard	EN Standard	CPR Rating
Classification / Euroclass	—	EN 13501-6	Dca s1a d2 a1
Single Cable Flame Rating	IEC 60332-1-2	—	Pass
Smoke Production	—	EN 50399 & EN 61034-2	s1a
Flaming Droplets/Particles	—	EN 50399	d2
Acid Gas Emission/Acidity	—	EN 60754-2	Pass

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**PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS**

Freq. MHz	IL (dB)		RL (dB)		NEXT (dB)		PSNEXT (dB)		ACRF (dB)		PSACRF (dB)	
	Standard	Typical	Standard	Typical	Standard	Typical	Standard	Typical	Standard	Typical	Standard	Typical
1	2.1	1.9	—	27.0	66.0	80.0	64.0	80.0	66.0	82.0	64.0	79.0
4	3.8	3.5	23.0	30.0	65.3	71.0	63.3	71.0	58.0	70.0	55.0	67.0
10	6.0	5.5	25.0	30.0	59.3	65.0	57.3	65.0	50.0	62.0	47.0	59.0
20	8.5	7.8	25.0	30.0	54.8	60.5	52.8	60.5	44.0	56.0	41.0	53.0
100	19.9	18.0	20.1	25.1	44.3	50.0	42.3	50.0	30.0	42.0	27.0	39.0
200	29.1	26.1	18.0	23.0	39.8	45.5	37.8	45.5	24.0	36.0	21.0	33.0
250	33.0	29.4	17.3	22.3	38.3	44.0	36.3	44.0	22.0	34.0	19.0	31.0
500	—	43.0	—	20.2	—	39.5	—	39.5	—	28.0	—	25.0
550	—	45.4	—	19.9	—	38.9	—	38.9	—	27.2	—	24.2

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

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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-Dca-500BU	500	Blue†	7.1	51.5	400 x 390	28.3	12
C6F/UTP-Dca-1000BU	1000	Blue†	7.1	51.5	600 x 315	57.5	6
C6F/UTP-Dca-D500BU††	500m	Blue†	7.1 x 14.4	103.1	600 x 315	58	6

† Also available in a range of non-standard colors ††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-Dca-RIX-305BU	305	Blue†	7.1	51.5	475 x 295 x 475	16.7	12

† Also available in a range of non-standard colors

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

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**USA**  
 Network Solutions Headquarters  
 +1 (800) 722 2082  
[infoUSA@leviton.com](mailto:infoUSA@leviton.com)  
 BERK-TEK™ Cable  
 +1 (800) 237 5835 | [infoUSA@leviton.com](mailto:infoUSA@leviton.com)

**Asia Pacific**  
 +852 3620 2602  
[infoAPAC@leviton.com](mailto:infoAPAC@leviton.com)

**Canada**  
 +1 (800) 461 2002  
[infoCanada@leviton.com](mailto:infoCanada@leviton.com)

**Europe**  
 +44 (0) 1592 772124  
[infoEurope@leviton.com](mailto:infoEurope@leviton.com)

**Latin America**  
 MX: +52 (55) 2128 6286  
 LATAM: +52 (55) 2333 5963  
[infoLATAM@leviton.com](mailto:infoLATAM@leviton.com)

**Middle East & Africa**  
 +971 (4) 247 9800  
[infoMEA@leviton.com](mailto:infoMEA@leviton.com)

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