

Category 6 F/UTP EuroClass Dca/CMR Cables

Datasheet: GD103594v10



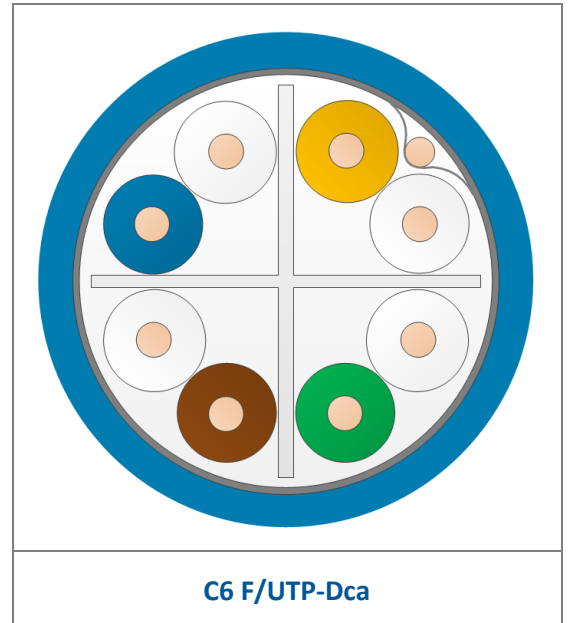
APPLICATION

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, and broadband video transmissions at frequencies up to 250MHz.

FEATURES AND 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* material enables the cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass Dca and UL 1666 Riser (CMR)
- Included in the Leviton Limited 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 are 100% recyclable

* Halogen Free Flame Retardant – Low Smoke



STANDARDS

- Designed and constructed to give optimal electrical performance to the following standards:
 - ISO/IEC 11801 Class E, IEC 61156-5
 - EN 50173-1 and EN 50288-5-1
 - ANSI/TIA 568.2-D
- Recommended for PoE standards:
 - IEEE 802.3bt PoE Type 1 (15.4 Watts) formerly 802.3af and IEEE 802.3bt PoE Type 2 (30 Watts) formerly 802.3at
 - IEEE 802.3bt PoE Type 3 (60 Watts) and IEEE 802.3bt PoE Type 4 (90 Watts)
 - Cisco UPoE (60 Watts), Cisco UPoE+ (90 Watts) and Power over HDBase™ PoH (95 Watts)

REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING
Single Cable Flame Rating	IEC/EN 60332-1-2	Pass
Acid Gas Emission/Acidity	EN 50267-2-3	Pass
Classification/EuroClass	EN 13501-6	Dca s2 d2 a1
Bundled Cable Flame Rating	-	UL 1666 Riser (CMR)

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PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Conductor Loop Resistance	Max 19Ω/100m	15Ω/100m
Conductor Resistance Unbalance	Max 2%	0.1%
Insulation Resistance	>5GΩ.km	>490GΩ.km
Dielectric Strength	2500 Vdc/2secs	Pass

SECONDARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Velocity of Propagation	<534nsec/100m @ 100MHz	502nsec/100m @ 100MHz
Delay Skew	Max 45nsec/100m @ 100MHz	23nsec/100m @ 100MHz
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω ± 3Ω @ 100MHz
Coupling Attenuation	Type 1b	86dB
Transfer Impedance	Grade 2	80mΩ/m @ 10MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	20	100	200	250	500	550
Insertion Loss (dB/100m)	Standard (Max)	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 (Min)	66.0	65.3	59.3	54.8	44.3	39.8	38.3	N/A	N/A
	Typical	80.0	71.0	65.0	60.5	50.0	45.5	44.0	39.5	38.9
PSNEXT (dB)	Standard (Min)	64.0	63.3	57.3	52.8	42.3	37.8	36.3	N/A	N/A
	Typical	80.0	71.0	65.0	60.5	50.0	45.5	44.0	39.5	38.9
ACR-F (dB)	Standard (Min)	66.0	58.0	50.0	44.0	30.0	24.0	22.0	N/A	N/A
	Typical	82.0	70.0	62.0	56.0	42.0	36.0	34.0	28.0	27.2
PSACR-F (dB)	Standard (Min)	64.0	55.0	47.0	41.0	27.0	21.0	19.0	N/A	N/A
	Typical	79.0	67.0	59.0	53.0	39.0	33.0	31.0	25.0	24.2
Return Loss (dB)	Standard (Min)	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

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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	0.68
Segregation Class	Class C		

STANDARD PACKAGING SPECIFICATIONS - REELS

Part Number	Packaging Length (m)	Color	Nom. Cable Dimension (mm)	Nom. Cable Weight (kg/km)	Reel Size Flange Dia. x Width (mm)	Gross Weight (kg/Item)	Reels 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

STANDARD PACKAGING SPECIFICATIONS – 305m BOXES

Part Number	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Box Size L x W x H (mm)	Gross Weight (kg/Item)	Items Per Pallet
C6F/UTP-Dca-Rlx-305BU†	Blue†	7.1	51.5	475 x 295 x 475	16.7	12

† Also available in a range of non-standard colors

†† Duplex Cable

COUNTRY OF ORIGIN

COO: United Kingdom

“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.