

Category 6A U/FTP EuroClass Dca Cables

Datasheet: GD103438v5



APPLICATION

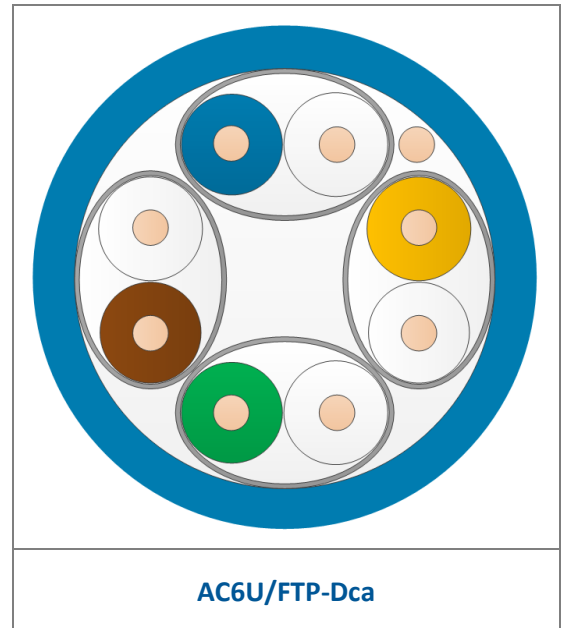
Leviton Category 6A U/FTP cables exceed Category 6A performance standards. They are specified to 500MHz and are suitable for use in all Class EA structured wiring cable systems. Category 6A U/FTP cables support 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet, voice and broadband video transmissions at frequencies up to 500MHz.

FEATURES AND BENEFITS

- 23 AWG solid annealed copper wire
- 4 twisted pairs individually screened and cabled together – providing EMI immunity
- Designed to support all Class EA protocols including 10GBASE-T
- HFFR-LS* material enables the cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass Dca
- Blue† jacket to identify EuroClass level Dca
- 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

* Halogen Free Flame Retardant – Low Smoke

† Also available in a range of non-standard colors



STANDARDS

- Designed and constructed to give optimum electrical performance to the following standards:
 - ISO/IEC 11801 Class EA, IEC 61156-5
 - EN 50173-1 and EN 50288-10-1
 - ANSI/TIA 568C.2
- Supports 10GBASE-T
- Meets the design requirements of 802.11ac wireless
- Recommended for PoE standards: IEEE 802.3af, 802.3at, 802.3bt, Cisco UPoE, and Power over HDBaseT™ (PoH) up to 100 watts

REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING	DUPLEX RATING
Single Cable Flame Rating	IEC/EN 60332-1-2	Pass	Pass
Acid Gas Emission/Acidity	EN 50267-2-3	Pass	Pass
Classification	EN 13501-6	Dca s2 d1 a1	Dca s2 d2 a1

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PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Conductor Loop Resistance	Max 19 Ω/100m	14Ω/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	413nsec/100m @ 100MHz
Delay Skew	Max 45nsec/100m @ 100MHz	4nsec/100m @ 100MHz
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω ± 3Ω @ 100MHz
Coupling Attenuation	Type 1b	75dB
Transfer Impedance	Grade 2	28mΩ/m @ 10MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	20	100	200	250	500	550
Insertion Loss (dB/100m)	Standard	N/A	3.8	5.9	8.4	19.1	27.6	31.1	45.3	N/A
	Typical	1.9	3.5	5.5	7.8	18.0	26.1	29.4	43.0	45.4
NEXT (dB)	Standard	N/A	66.3	60.3	55.8	45.3	40.8	39.3	34.8	N/A
	Typical	100.0	100.0	100.0	100.0	94.3	88.9	87.1	81.7	81.0
PSNEXT (dB)	Standard	N/A	63.3	57.3	52.8	42.3	37.8	36.3	31.8	N/A
	Typical	97.0	97.0	97.0	97.0	91.3	85.9	84.1	78.7	78.0
ELFEXT (dB/100m)	Standard	N/A	56.0	48.0	42.0	28.0	22.0	20.0	14.0	N/A
	Typical	90.0	90.0	90.0	84.8	70.8	64.8	62.8	56.8	56.0
PSELFEXT (dB/100m)	Standard	N/A	53.0	45.0	39.0	25.0	19.0	17.0	11.0	N/A
	Typical	87.0	87.0	87.0	81.8	67.8	61.8	59.8	53.8	53.0
Return Loss (dB)	Standard	20.0	23.0	25.0	25.0	20.1	18.0	17.3	17.3	N/A
	Typical	27.0	30.0	30.0	30.0	25.1	23.0	22.3	20.2	19.9
PSANEXT (dB)	Standard	67.0	67.0	67.0	67.0	62.5	58.0	56.5	52.0	N/A
	Typical	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PSAACR-F (dB)	Standard	67.0	66.2	58.2	52.2	38.2	32.2	30.2	24.2	N/A
	Typical	98.1	96.5	94.5	92.2	82.0	73.9	70.6	57.0	54.6

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	0.80
Segregation Class	Class C		

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PRINT LEGEND

Example print legend:

[Length Mark]m BRAND-REX a LEVITON company AC6U/FTP-Dca Cat 6A U/FTP EN 50399 EuroClass Dca s2 d1 a1 NVP 0.80
MADE IN UK [ID number] [Week/Year]

STANDARD PACKAGING SPECIFICATIONS - REELS

Part Number	Packaging Length (m)	Color	Nominal Cable Dimension (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
AC6U/FTP-Dca-500BU	500	Blue†	6.8	45.2	400 x 390	25.1	12
AC6U/FTP-Dca-1000BU	1000	Blue†	6.8	45.2	600 x 325	51.2	6
AC6U/FTP-Dca-D500BU ††	500	Blue†	6.8 x 13.8	90.6	600 x 325	51.7	6

STANDARD PACKAGING SPECIFICATIONS - BOXES

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 Pallet
AC6U/FTP-Dca-Rlx-305BU	305	Blue†	6.8	45.2	475 x 295 x 475	14.8	12

† Also available in a range of non-standard colors

†† Duplex Cable

“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.