

# Category 7A S/FTP EuroClass Dca Cables

Datasheet: GD103888v6



## APPLICATION

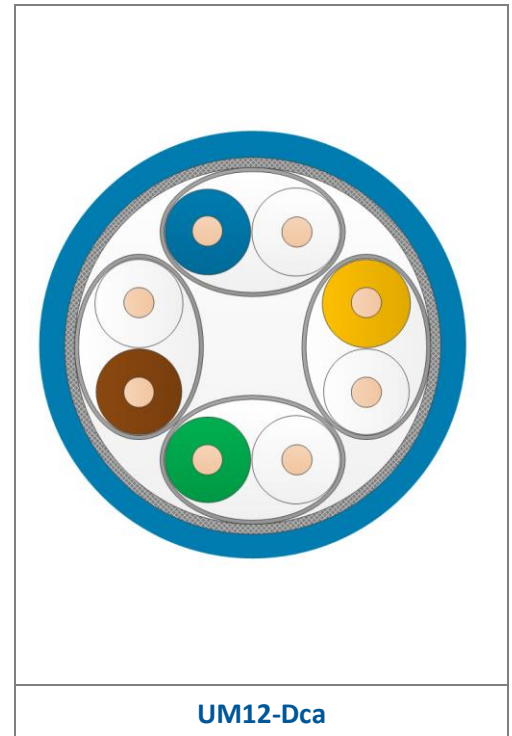
Leviton Category 7A S/FTP cables exceed Category 7A performance standards. They are specified to 1000MHz and rated to 1200MHz and are suitable for use in all Class F<sub>A</sub> structured wiring cable systems. The applications supported include 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet, and broadband video transmissions at frequencies up to 1000MHz.

## FEATURES AND BENEFITS

- 22 AWG solid annealed copper wire
- Gas injection foamed polyolefin core insulation – offering superior signal speed
- 4 twisted pairs individually screened and cabled together – providing EMI immunity
- Pairs color coded in accordance with EN 50288-1
- Overall braided screen – for improved shielding efficiency, increased mechanical robustness and heat dissipation
- Blue† HFFR-LS\* jacket enables the cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass Dca
- Designed to support all Class F<sub>A</sub> protocols including 10GBASE-T
- 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 F<sub>A</sub>, IEC 61156-5
  - EN50173-1 and EN 50288-9-1
- Meets the design requirements of 802.11ac wireless.
- Recommended for PoE standards:
  - IEEE 802.3bt PoE Type 1 (15.4 Watts) formerly 802.3af
  - IEEE 802.3bt PoE Type 2 (30 Watts) formerly 802.3at
  - IEEE 802.3bt PoE Type 3 (60 Watts)
  - IEEE 802.3bt PoE Type 4 (90 Watts)
  - Cisco UPoE (60 Watts)
  - Cisco UPoE+ (90 Watts)
  - Power over HDBaseT™ PoH (95 Watts)

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## REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING
Single Cable Flame Rating	IEC/EN 60332-1-2	Pass
Smoke Production	EN 61034	Pass
Acid Gas Emission/Acidity	EN 50267-2-3	Pass
Classification / EuroClass	EN 13501-6	Dca s1a d1 a1

## PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Conductor Loop Resistance	Max 19 Ω/100m	12Ω/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 1	90dB
Transfer Impedance	Grade 1	7mΩ/m @ 10MHz

## ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	100	250	500	600	1000	1200
Insertion Loss (dB/100m)	Standard (Max)	N/A	3.7	5.8	18.5	29.7	42.8	47.1	61.9	N/A
	<b>Typical</b>	<b>1.9</b>	<b>3.4</b>	<b>5.3</b>	<b>16.7</b>	<b>26.9</b>	<b>38.7</b>	<b>42.7</b>	<b>56.2</b>	<b>62.1</b>
NEXT (dB)	Standard (Min)	78.0	78.0	78.0	75.4	69.4	64.9	63.7	60.4	N/A
	<b>Typical</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>97.2</b>	<b>91.8</b>	<b>90.4</b>	<b>86.4</b>	<b>85.0</b>
PSNEXT (dB)	Standard (Min)	75.0	75.0	75.0	72.4	66.4	61.9	60.7	57.4	N/A
	<b>Typical</b>	<b>90.0</b>	<b>90.0</b>	<b>90.0</b>	<b>90.0</b>	<b>88.0</b>	<b>83.5</b>	<b>82.3</b>	<b>79.0</b>	<b>77.8</b>
ACR-F (Db)	Standard (Min)	78.0	78.0	78.0	65.3	57.3	51.3	49.7	45.3	N/A
	<b>Typical</b>	<b>100.0</b>	<b>99.0</b>	<b>91.0</b>	<b>71.0</b>	<b>63.0</b>	<b>57.0</b>	<b>55.4</b>	<b>51.0</b>	<b>49.4</b>
PSACR-F-f (dB)	Standard (Min)	75.0	75.0	75.0	62.3	54.3	48.3	46.7	42.3	N/A
	<b>Typical</b>	<b>90.0</b>	<b>90.0</b>	<b>84.5</b>	<b>64.5</b>	<b>56.5</b>	<b>50.5</b>	<b>48.9</b>	<b>44.5</b>	<b>42.9</b>
Return Loss (dB)	Standard (Min)	N/A	23.0	25.0	20.1	17.3	17.3	17.3	15.1	N/A
	<b>Typical</b>	<b>30.0</b>	<b>33.0</b>	<b>36.0</b>	<b>35.1</b>	<b>32.3</b>	<b>31.3</b>	<b>30.5</b>	<b>28.3</b>	<b>27.5</b>
PSANEXT (dB)	<b>Typical</b>	<b>98.1</b>	<b>96.6</b>	<b>94.7</b>	<b>83.3</b>	<b>70.4</b>	<b>53.1</b>	<b>47.7</b>	<b>30.2</b>	<b>22.8</b>
PSAACR-F (dB)	<b>Typical</b>	<b>88.1</b>	<b>86.6</b>	<b>84.7</b>	<b>73.3</b>	<b>61.2</b>	<b>44.8</b>	<b>39.6</b>	<b>22.8</b>	<b>15.7</b>

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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	Field Test NVP Value	0.80
Segregation Class	Class D		

## STANDARD PACKAGING SPECIFICATIONS

Part Number	Package Length (m)	Color	Nominal Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange Diameter x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
UM12-Dca-500BU <sup>†</sup>	500	Blue <sup>†</sup>	7.2	61.5	400 x 390	33.2	12
UM12-Dca-1000BU <sup>†</sup>	1000	Blue <sup>†</sup>	7.2	61.5	600 x 405	68.0	4

<sup>†</sup> Also available in a range of non-standard colors

## COUNTRY OF ORIGIN

COO: United Kingdom

*“Leviton is **dedicated** to **designing, developing and manufacturing** sustainable **high performance** structured cabling and specialty **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.