## **Category 7 S/FTP External Cable**

### Datasheet: GD063256v10

#### **APPLICATION**

Leviton Category 7 S/FTP External cables exceed Category 7 performance standards. They are specified to 600MHz and rated to 1000MHz and are suitable for use in all Class F structured wiring cable systems. The applications supported include 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet, and broadband video transmission at frequencies as high as 600MHz.

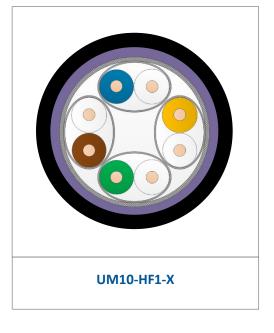
#### **FEATURES AND BENEFITS**

- Black Polyethylene outer jacket offers superior UV and water resistance
- Violet HFFR-LS\* inner jacket
- Gas injection foamed Polyolefin core insulation offers superior signal speed
- 23 AWG solid annealed copper wire
- 4 twisted pairs individually screened and cabled together providing EMI immunity
- Overall braided screen for improved shielding efficiency, increased mechanical robustness and heat dissipation
- Designed for installation in an external protected environment
- 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
- Designed and manufactured in a carbon neutral facility in the UK

\* Halogen Free Flame Retardant – Low Smoke

#### **STANDARDS**

- Designed and constructed to give optimum electrical performance to the following standards:
  - IEC 61156-5
  - EN 50288-4-1
- 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<sup>™</sup> PoH (95 Watts)





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#### **REACTION TO FIRE**

Material Identifier	HF1-X				
Material Description	Inner – HFFR-LS Outer - Polyethylene				
Flammability Rating	N/A – External Only				
Classification / EuroClass	N/A – External Only				

#### **PRIMARY ELECTRICAL PARAMETERS**

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C			
Conductor Loop Resistance	Max 19 Ω/100m	14 Ω/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	Туре 1	90dB			
Transfer Impedance	Grade 1	8mΩ/m @ 10MHz			

#### **ELECTRICAL PERFORMANCE**

Frequency (MHz)		1	4	10	100	200	250	500	600	1000
Insertion Loss (dB/100m)	Standard (Max)	2.0	3.7	5.9	19.0	27.5	31.0	45.3	50.1	N/A
	Typical	1.9	3.5	5.5	18.0	25.7	28.7	41.1	45.5	60.9
NEXT (dB)	Standard (Min)	80.0	80.0	80.0	72.4	67.9	66.5	61.9	60.8	N/A
	Typical	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0	89.0
PSNEXT (dB)	Standard (Min)	77.0	77.0	77.0	69.4	64.9	63.5	58.9	57.8	N/A
	Typical	97.0	97.0	97.0	97.0	97.0	97.0	97.0	92.0	86.0
ACR-F (dB)	Standard (Min)	80.0	80.0	74.0	54.0	48.0	46.0	40.0	38.4	N/A
	Typical	103.9	103.9	102.8	89.4	78.2	74.6	65.2	55.2	50.8
PSACR-F (dB)	Standard (Min)	77.0	77.0	71.0	51.0	45.0	43.0	37.0	35.4	N/A
	Typical	100.9	100.9	99.8	86.4	75.2	71.6	62.2	52.2	47.8
Return Loss (dB)	Standard (Min)	20.0	23.0	25.0	20.1	18.0	17.3	17.3	17.3	N/A
	Typical	27.0	33.1	34.0	39.3	38.4	34.4	28.7	27.1	24.6
PSANEXT (dB)	Typical	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PSAACR-F (dB)	Typical	98.0	96.4	94.3	81.5	73.2	68.8	55.9	51.1	34.7

• The standard values shown are the most demanding taken from the relevant IEC, TIA and EN specifications. These standard values are the maximum permittable for Insertion loss and the minimum permittable for other parameters. N/A – Not Applicable



#### 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 - REELS**

Part Number	Packaging Length (m)	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	<b>Reel Size</b> Flange Diameter x Width (mm)	Gross Weight (kg/Item)	ltems Per Pallet
UM10-HF1-X-500BK*	500	Black	8.2	61.9	465 x 390	33.9	6
UM10-HF1-X-1000BK*	1000	Black	8.2	61.9	750 x 405	70.8	2

\* Only available in Europe and Middle East regions

"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.