

Category 6 U/UTP External Cable

Datasheet: GD041784v8



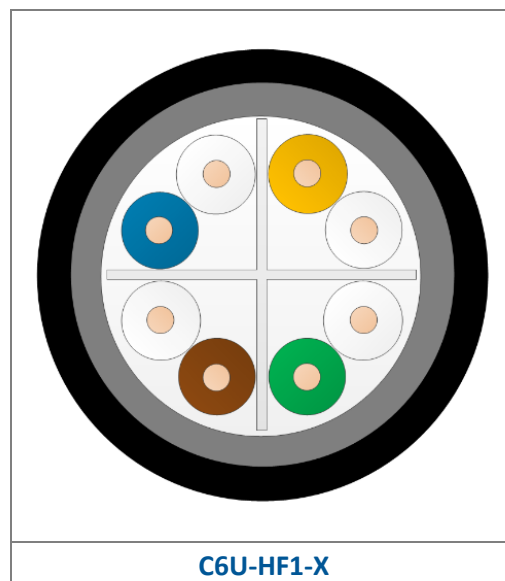
APPLICATION

Leviton's Category 6 U/UTP External cable exceeds the Category 6 performance standards. It is rated to 250MHz and is suitable for use in all Class E structured wiring cable systems. Category 6 U/UTP External cable supports Gigabit Ethernet, Power over Ethernet, voice, and broadband video transmission at frequencies up to 250MHz.

FEATURES AND BENEFITS

- Black Polyethylene outer jacket offers superior UV and water resistance
- HFFR-LS* inner jacket
- 23 AWG solid annealed copper wire
- 4 unshielded twisted pairs cabled together
- Central separator for increased internal crosstalk performance
- 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
- Delivered in 100% recyclable packaging

* Halogen Free Flame Retardant – Low Smoke



STANDARDS

- Designed and constructed to give optimum electrical performance to the following standards:
 - ISO/IEC 11801 Class E, IEC 61156-5
 - EN50173-1 and EN 50288-6-1
 - ANSI/TIA 568D.2
- Supports Gigabit Ethernet
- 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

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	16 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	490nsec/100m @ 100MHz
Delay Skew	Max 45nsec/100m @100MHz	30nsec/100m @ 100MHz
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω ± 3Ω @ 100MHz
Transverse Conversion Loss (TCL)	≥50-10log(f)dB	61dB @ 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	86.5	77.5	71.5	67.0	56.5	52.0	50.5	46.0	45.4
PSNEXT (dB)	Standard (Min)	64.0	63.3	57.3	52.8	42.3	37.8	36.3	N/A	N/A
	Typical	84.5	75.5	69.5	65.0	54.5	50.0	48.5	44.0	43.4
ACR-F (dB)	Standard (Min)	66.0	58.0	50.0	44.0	30.0	24.0	22.0	N/A	N/A
	Typical	85.0	73.0	65.0	59.0	45.0	39.0	37.0	31.0	30.2
PSACR-F (dB)	Standard (Min)	64.0	55.0	47.0	41.0	27.0	21.0	19.0	N/A	N/A
	Typical	82.0	70.0	62.0	56.0	42.0	36.0	34.0	28.0	27.2
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
PSANEXT (dB)	Typical	84.6	73.9	66.0	59.1	38.5	25.9	21.1	3.0	0.0
PSAACR-F (dB)	Typical	82.6	71.9	64.0	57.1	36.5	23.9	19.1	1.0	-2.0

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INSTALLATION

Temperature (Installation)	0°C to +50°C
Temperature (Operation)	-20°C to +75°C
Max Tensile Load (Installation)	10kg
Segregation Class	Class B

Min Bend Radius (Installation)	8 x Outer Diameter
Min Bend Radius (Operation)	4 x Outer Diameter
Field Test NVP Value	0.69

STANDARD PACKAGING SPECIFICATIONS - REELS

Part Number	Packaging Length (m)	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange Diameter x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
C6U-HF1-X-500BK*	500	Black	7.0	48.7	400 x 390	26.8	12
C6U-HF1-X-1000BK*	1000	Black	7.0	48.7	600 x 405	55.2	4

COUNTRY OF ORIGIN

COO: United Kingdom

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

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