

Category 6 U/UTP External Cable

Datasheet: GD041784v6



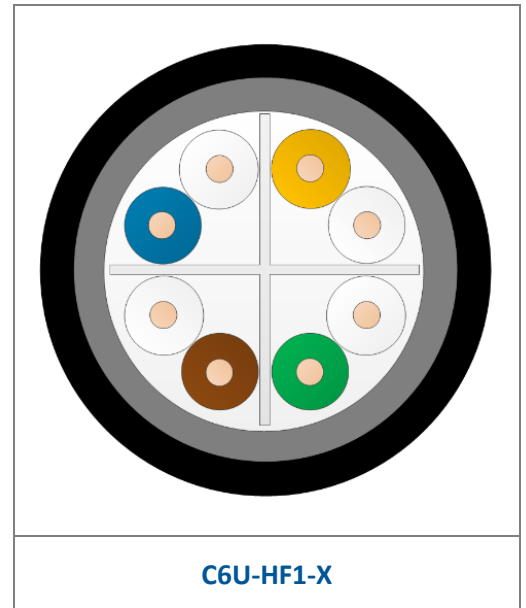
APPLICATION

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 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 802.3af, 802.3at, 802.3bt, Cisco UPoE, and Power over HDBaseT™ (PoH) up to 100 watts

MATERIAL PERFORMANCE

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

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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	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	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	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	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	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	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
ACR (dB)	Typical	84.6	73.9	66.0	59.1	38.5	25.9	21.1	3.0	0.0
PSACR (dB)	Typical	82.6	71.9	64.0	57.1	36.5	23.9	19.1	1.0	-2.0

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

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PRINT LEGEND

Example print legend:

[Length Mark]m BRAND-REX a LEVITON company C6U-HF1-X Cat 6 NVP 0.69 MADE IN UK [ID number] [Week/Year]

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

* 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.