Category 5e SF/UTP Cables

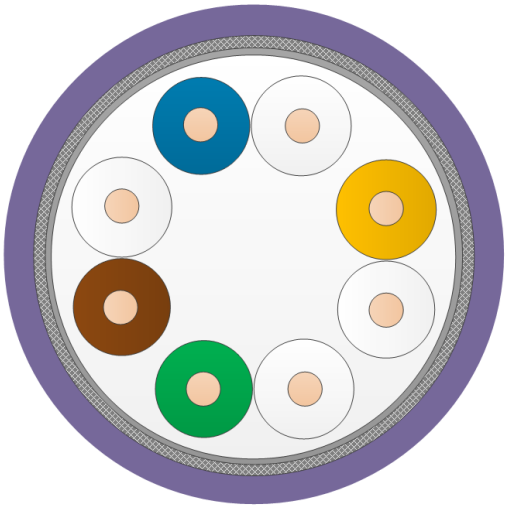
Datasheet: GD103688v3

APPLICATION

Leviton Category 5e SF/UTP cables exceed Category 5e performance standards. They are rated to 100MHz and are suitable for use in all Class D structured wiring cable systems. Leviton Category 5e SF/UTP cables support Gigabit Ethernet, Power over Ethernet and voice transmissions at frequencies up to 100MHz.

FEATURES AND BENEFITS

- 24 AWG solid annealed copper wire
- Polyolefin core insulation
- 4 unshielded twisted pairs cabled together
- Aluminium polyester shield
- Overall braided shield – for improved shielding efficiency, increased mechanical robustness and heat dissipation
- Violet† HFFR-LS* sheathing enables the cable to meet Construction Products Regulation (CPR) EuroClass Eca
- Designed to support all Class D protocols including Gigabit Ethernet
- 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.



GPS-HF1-Eca

** 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 D, IEC 61156-5
  - EN50173-1 and EN 50288-2-1
  - ANSI/TIA 568C.2
- Supports Gigabit Ethernet
- Supports Power over Ethernet (PoE) and Power over Ethernet Plus (PoE+) applications

MATERIAL PERFORMANCE

Material Identifier	**HF1**
Material Description	Standard HFFR-LS
Flammability Rating	IEC/EN 60332-1-2
EuroClass Level EN13501-6	Eca

PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Conductor Loop Resistance	Max 19Ω/100m	16Ω/100m
Conductor Resistance Unbalance	Max 2%	0.1%
Insulation Resistance	>5GΩ.km	>310GΩ.km
Dielectric Strength	2500 Vdc/2secs	Pass

SECONDARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Propagation Delay	<534nsec/100m @ 100MHz	480nsec/100m @ 100MHz
Delay Skew	Max 45nsec/100m @100MHz	11nsec/100m @100MHz
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω +/- 3Ω @ 100MHz
Transfer Impedance	Grade 2	14mΩ/m @ 10MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		**1**	**4**	**10**	**16**	**20**	**31.25**	**100**	**200**	**250**
Insertion Loss (dB/100m)	Standard	2.1	4.0	6.3	8.0	9.0	11.4	21.4	*N/A*	*N/A*
	Typical	***2.0***	***3.8***	***6.0***	***7.6***	***8.6***	***10.8***	***20.4***	***30.3***	***34.5***
NEXT (dB)	Standard	65.3	56.3	50.3	47.2	45.8	42.9	35.3	*N/A*	*N/A*
	Typical	***73.3***	***64.3***	***58.3***	***55.2***	***53.8***	***50.9***	***43.3***	***38.8***	***37.3***
PSNEXT (dB)	Standard	62.3	53.3	47.3	44.2	42.8	39.9	32.3	*N/A*	*N/A*
	Typical	***70.3***	***61.3***	***55.3***	***52.2***	***50.8***	***47.9***	***40.3***	***35.8***	***34.3***
ELFEXT (dB/100m)	Standard	63.8	51.8	43.8	39.7	37.8	33.9	23.8	*N/A*	*N/A*
	Typical	***78.8***	***66.8***	***58.8***	***54.7***	***52.8***	***48.9***	***38.8***	***32.8***	***30.8***
PSELFEXT (dB/100m)	Standard	60.8	48.8	40.8	36.7	34.8	30.9	20.8	*N/A*	*N/A*
	Typical	***76.8***	***64.8***	***56.8***	***52.7***	***50.8***	***46.9***	***36.8***	***30.8***	***28.8***
Return Loss (dB)	Standard	*N/A*	23.0	25.0	25.0	25.0	23.6	20.1	*N/A*	*N/A*
	Typical	***25.0***	***28.0***	***30.0***	***30.0***	***30.0***	***28.6***	***25.1***	***23.0***	***22.3***
ACR (dB/100m)	***Typical***	***71.3***	***60.5***	***52.3***	***47.6***	***45.2***	***40.0***	***22.9***	***8.5***	***2.9***
PSACR (dB/100m)	***Typical***	***68.3***	***57.5***	***49.3***	***44.6***	***42.2***	***37.0***	***19.9***	***5.5***	***-0.1***

INSTALLATION

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

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

PRINT LEGEND

Example print legend:

[Length Mark]m BRAND-REX a LEVITON company GPS-HF1-Eca Cat 5e SF/UTP IEC 60332-1-2 EuroClass Eca NVP 0.68 MADE IN UK [ID number] [Week/Year]

STANDARD PACKAGING SPECIFICATIONS

Part Number	Nominal Cable Diameter *(mm)*	Nominal Cable Weight *(kg/km)*	Reel Size *Flange x Width (mm)*	Gross Weight *(kg/Item)*	Items Per Pallet
GPS-HF1-Eca-500VT†	6.3	44.9	400 x 310	24.5	18
GPS-HF1-Eca-1000VT‡	6.3	44.9	600 x 325	50.9	6

†*500 = 500m length*
‡*1000 = 1000m length*

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