

Category 5e SF/UTP Cables

Datasheet: GD103688v2

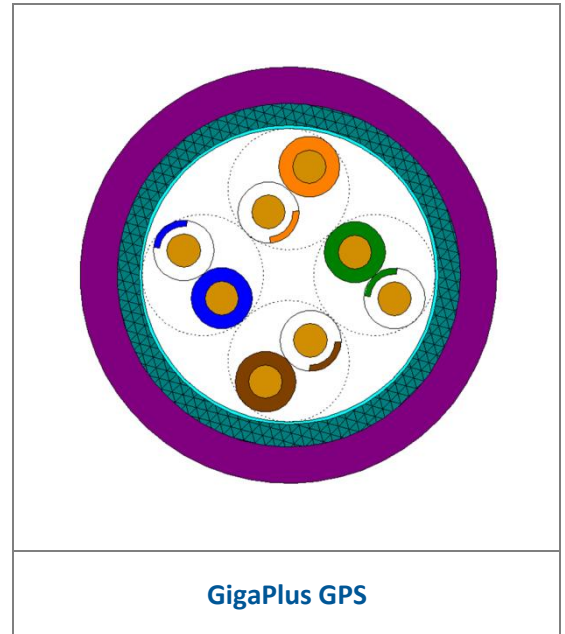
APPLICATION

Brand-Rex GigaPlus GPS cables exceed the Category 5e performance standards. They are rated to 100MHz and are suitable for use in all Class D structured wiring cable systems.

The GigaPlus GPS cables support Gigabit Ethernet, PoE, PoE+ 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
- Supports Power Over Ethernet (PoE & PoE+) applications
- Included in the Leviton and Brand-Rex 25 Year System Warranties when used in conjunction with Leviton or Brand-Rex copper connectivity. System warranties available for qualified projects installed by certified contractors.



* Halogen Free Flame Retardant – Low Smoke

† Also available in a range of non-standard colours

Applicable Cable Standards: IEC 61156-5 and EN 50288-2-1

MATERIAL PERFORMANCE

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

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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	na	na
	<i>Typical</i>	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	na	na
	<i>Typical</i>	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	na	na
	<i>Typical</i>	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	na	na
	<i>Typical</i>	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	na	na
	<i>Typical</i>	76.8	64.8	56.8	52.7	50.8	46.9	36.8	30.8	28.8
Return Loss (dB)	Standard	na	23.0	25.0	25.0	25.0	23.6	20.1	na	na
	<i>Typical</i>	25.0	28.0	30.0	30.0	30.0	28.6	25.1	23.0	22.3
ACR (dB/100m)	<i>Typical</i>	71.3	60.5	52.3	47.6	45.2	40.0	22.9	8.5	2.9
PSACR (dB/100m)	<i>Typical</i>	68.3	57.5	49.3	44.6	42.2	37.0	19.9	5.5	-0.1

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company

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 per simplex cable	Field Test NVP Value	0.69
Segregation Class	Class C		

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

Brand-Rex 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

*“Brand-Rex is **dedicated** to **designing, developing and manufacturing** sustainable **high performance** structured cabling and speciality **cabling solutions**”*

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