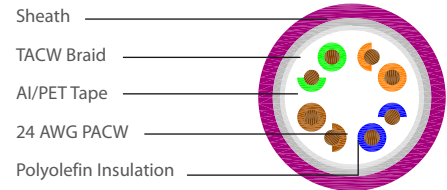


Cable Standards

The cable is compliant with:

- ISO/IEC 61156-5, EN 50288-2-1 and ANSI/TIA/EIA 568C

Brand-Rex Copper Cables - GigaPlus
Communication Cable, SF/UTP, 100 Ω, 4x2xAWG 24/1



Independent 3rd Party Certification (3P)

PRODUCT DESCRIPTION:

GigaPlus SF/UTP 100 Ω 4x2xAWG 24/1 premium grade Class D/Cat5e cable to support Gigabit Ethernet protocol combined with exceptional EMI/RFI protection for installations in horizontal and backbone areas.

PRODUCT PERFORMANCE:

Core

- Conductor: 24 AWG Plain Annealed Copper Wire
- Insulation: Polyolefin
- Diameter: 1.10mm Nominal
- Pair: 2 of the above cores
- Pair Colour: Blue-White, Orange-White, Green-White, Brown-White

Final Assembly

- Cable: 4 of the above pairs
- Binder: Wrapped with polyester tape, 100% coverage
- Tape Screen: Wrapped with aluminium polyester tape, applied metal side out
- Braid Screen: Tinned Annealed Copper Wire
- Sheath: PVC or LSHF compound

Mechanical and Environmental

- Temp - Installation: 0°C to +50°C
- Temp - Operation: -20°C to +75°C
- Max Tensile Load: 10kg per simplex cable (installation)
- Min Bend Radius: 8 x Outer Diameter (installation), 4 x Outer Diameter (operation)

Electrical Characteristics @ 20°C	Specification	Typical Performance
Conductor Loop Resistance	Max 19 Ω / 100m	16 Ω / 100m
Conductor Resistance Unbalance	Max 2%	0.5%
Dielectric Strength	1.0kV dc or 0.7kV ac for 1 min	100% in process test
Insulation Resistance	>500MΩ.km @ 100-500 V test voltage	>5 GΩ.km
Capacitance Unbalance to Earth	Max 160 pF/100m	40 pF/100m
Velocity of Propagation	<537.6 nsec/100m @ 100MHz	496 nsec/100m @ 100MHz (NVP for hand held testers = 0.68)
Skew	Max 40 nsec/100m @ 100MHz	25 nsec/100m @ 100MHz
Mean Characteristic Impedance	100 Ω +/- 5 Ω @ 100MHz	100 Ω +/- 3Ω @ 100MHz
Transfer Impedance	Max 100 mΩ/m @ 100 MHz	20 mΩ/m @ 10MHz (ISO 61156 grade 2 cable)
Coupling Attenuation up to 1Ghz	Min 55 dB	80 dB

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100	155	200	250	
Insertion Loss (dB / 100m)	Spec	2.1	4.0	6.3	8.0	9.0	11.4	16.5	21.4	na	na	
	Typical	2.0	3.8	6.0	7.6	8.6	10.8	15.8	20.4	26.1	30.3	34.5
NEXT (dB)	Spec	65.3	56.3	50.3	47.2	45.8	42.9	38.4	35.3	na	na	
	Typical	73.3	64.3	58.3	55.2	53.8	50.9	46.4	43.3	40.4	38.3	37.3
PSNEXT (dB)	Spec	62.3	53.3	47.3	44.2	42.8	39.9	35.4	32.3	na	na	
	Typical	70.3	61.3	55.3	52.2	50.8	47.9	43.4	40.3	37.4	35.8	34.3
ELFEXT (dB / 100m)	Spec	63.8	51.8	43.8	39.7	37.8	33.9	27.9	23.8	na	na	
	Typical	78.8	66.8	58.8	54.7	52.8	48.9	42.9	38.8	35.0	32.8	30.8
PSSELFEXT (dB / 100m)	Spec	60.8	48.8	40.8	36.7	34.8	30.9	24.9	20.8	na	na	
	Typical	76.8	64.8	56.8	52.7	50.8	46.9	40.9	36.8	33.0	30.8	28.8
Return Loss (dB / 100m)	Spec	na	23.0	25.0	25.0	25.0	23.6	21.5	20.1	na	na	
	Typical	25.0	28.0	30.0	30.0	30.0	28.6	26.5	25.1	23.8	23.0	22.3
ACR (dB / 100m)	Typical	71.3	60.5	52.3	47.6	45.2	40.0	30.6	22.9	14.3	8.5	2.9
PSACR (dB / 100m)	Typical	68.3	57.5	49.3	44.6	42.2	37.0	27.6	19.9	11.3	5.5	-0.1

Product Part Numbering

Part Number	Length (m)	Cable type	Colour	Nominal Cable Diameter (mm)	Nominal Weight (Kg/Km)	Calorific Value kWh/m	Fire Safety Rating
GPS-500GY	500	PVC	Grey	6.3	47	0.15	IEC 60332-1-2
GPS-1000GY	1000						
GPS-D500GY	500	PVC	Grey	12.7 x 6.3	95	0.31	IEC 60332-1-2
GPS-D1000GY	1000						
GPS-HF1-500VT	500	LSHF	Violet	6.3	48	0.13	IEC 60332-1-2
GPS-HF1-1000VT	1000						
GPS-HF1-D500VT	500	LSHF	Violet	6.3	96	0.26	IEC 60332-1-2
GPS-HF1-D1000VT	1000						
GPS-HF3-500BU	500	LSHF	Blue	6.9	58	0.21	IEC 60332-3-24
GPS-HF3-1000BU	1000						
GPS-HF3-D500BU	500	LSHF	Blue	13.9 x 6.9	116	0.42	IEC 60332-3-24
GPS-HF3-D1000BU	1000						