

**Cable Standards**

The cable is compliant with:

- ISO/IEC 61156-5, EN 50288-3-1 and ANSI/TIA/EIA 568C

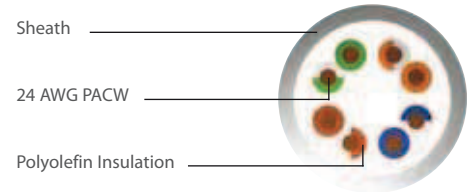
**Brand-Rex Copper Cables - GigaPlus**  
Communication Cable, U/UTP, 100 Ω, 4x2xAWG 24/1

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	<534 nsec/100m @ 100MHz	496 nsec/100m @ 100MHz (NVP for hand held testers = 0.69)
Skew	Max 40 nsec/100m @ 100MHz	25 nsec/100m @ 100MHz
Mean Characteristic Impedance	100 Ω +/- 5 Ω @ 100MHz	100 Ω +/- 3 Ω @ 100MHz
Coupling Attenuation up to 1Ghz	Min 40 dB	50dB

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	21.3	na	na
	Typical	1.8	3.6	5.8	7.4	8.3	10.5	15.3	19.8	25.4	33.4
NEXT (dB)	Spec	65.3	56.3	50.3	47.3	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	38.8
PSNEXT (dB)	Spec	62.3	53.3	47.3	44.2	42.8	39.9	35.4	32.3	na	na
	Typical	71.3	62.3	56.3	53.2	51.8	48.9	44.4	41.3	38.4	36.8
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
PSELFEXT (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
Return Loss (dB / 100m)	Spec	na	23.1	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	38.6	26.5	25.1	23.8	23.0
ACR (dB / 100m)	Typical	71.5	60.7	52.5	47.8	45.5	40.4	31.1	23.5	15	9.4
PSACR (dB / 100m)	Typical	69.5	58.7	50.5	45.8	43.5	38.4	29.1	21.5	13	7.4

**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
GPU-Rlx-305GY	305	PVC	Grey	4.65	28	0.10	IEC 60332-1-2
GPU-500GY	500						
GPU-1000GY	1000						
GPU-D500GY	500	PVC	Grey	9.4 x 4.65	56	0.20	IEC 60332-1-2
GPU-D1000GY	1000						
GPU-HF1-Rlx-305VT	305	LSHF	Violet	4.85	30	0.09	IEC 60332-1-2
GPU-HF1-500VT	500						
GPU-HF1-1000VT	1000						
GPU-HF1-D500VT	500	LSHF	Violet	10.0 x 4.95	63	0.19	IEC 60332-1-2
GPU-HF1-D1000VT	1000						
GPU-HF3-500BU	500	LSHF	Blue	5.65	41	0.17	IEC 60332-3-24
GPU-HF3-1000BU	1000						
GPU-HF3-D500BU	500						
GPU-HF3-D1000BU	1000	PE	Black	5.9	38	0.21	N/A
GPU-X-500BK	500						
GPU-X-1000BK	1000	PE	Black	6.1	40	0.21	N/A
GPU-HF1-X-500BK	500						
GPU-HF1-X-1000BK	1000						



**Independent 3rd Party Certification (3P)**

**PRODUCT DESCRIPTION:**

GigaPlus U/UTP 100 Ω 4x2xAWG 24/1 premium grade Class D/Cat5e cable to support Gigabit Ethernet protocol for installation in horizontal and backbone areas.

**PRODUCT PERFORMANCE:**

**Core**

- Conductor: 24 AWG Plain Annealed Copper Wire
- Insulation: Polyolefin
- Diameter: 0.94mm 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
- Sheath: PVC or LSHF or for external cables PE 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)