



CATEGORY 6 U/UTP OUTDOOR PE CABLE JACKET

Product Type LAN Cable

Product Family GigaLan

Construction	RoHS Compliant
	Category 6
	U/UTP
	Polyethylene Jacket

General Characteristics

Features 4 twisted-pair cable, using solid bare copper conductor 24/23 AWG, insulated with HDPE-high density polyethylene. External jacket using black LLDPE-linear low density polyethylene UV resistant suitable for outdoor application.

Compatibility FCS products

Applications

1. Cable comply with electrical requirements of ANSI/TIA-568-C.2 and ISO/IEC 11801
2. Cable comply with RoHS (Restriction of Hazardous Substances) directive
3. Cable is compatible with RJ-45 Cat 6 female

Standards Compliance ANSI/TIA-568-C.2 Category 6 and ISO/IEC 11801 Category 6

Constructive characteristic

Conductor Solid bare copper with nominal diameter 24/23AWG.

Insulation High density Polyethylene. Nominal diameter 1.0mm

Insulation Resistance 10000 MΩ.km

Number of Pairs 4 pairs, 24/23 AWG

Pair All pairs are twisted in such way to reduce Crosstalk effects. Each conductor is identified according with the following color sequence.

Color Codes

Pair	Insulation Color "A"	Insulation Color "B"
1	Blue	White / Blue Stripe
2	Orange	White / Orange Stripe
3	Green	White / Green Stripe
4	Brown	White / Brown Stripe

Cabling All pairs are assembled, making the core cable. Will be used a central member (Cross web) made of a thermoplastic material to separate all 4 pairs.

Shield Unshielded (U/UTP).

Sheath Black polyethylene (LLDPE) jacket, UV stabilized, suitable for outdoor application

Nominal Diameter	6.0mm
Color	Black polyethylene jacket
Cable Weight	39kg/km
Physical Characteristics	
Installation Temperature	0°C up to 50°C
Storage Temperature	-20 °C up to 80 °C
Operation Temperature	-20°C up to 60°C
Electrical Characteristics	
Maximum Unbalance Resistance	5%
Conductor Max. DC Resistance at 20°C	93.8 Ω/km
Maximum Mutual Capacitance 1kHz	56 pF/m
Max. Unbalance Capacitance Pair x Ground	3.3 pF/m
Characteristic Impedance	100±15% Ω
Maximum Propagation Delay	545ns/100m @ 10MHz
Maximum Delay Skew	45ns/100m
Dielectric strength	2500 VDC/3s
NVP	68%

Transmission Performance

Freq.	IL dB	NEXT dB	PSNEXT dB	ACR dB
(MHz)	TIA Máx	TIA Min	TIA Min	TIA Mín
1	2.0	74.3	72.3	72.3
4	3.8	65.3	63.3	61.5
8	5.3	60.8	58.8	55.4
10	6.0	59.3	57.3	53.3
16	7.6	56.2	54.2	48.7
20	8.5	54.8	52.8	46.3
25	9.5	53.3	51.3	43.8
31.25	10.7	51.9	49.9	41.2
62.5	15.4	47.4	45.4	32.0
100	19.8	44.3	42.3	24.5
200	29.0	39.8	37.8	10.8
250	32.8	38.3	36.3	5.5

Freq.	PSACR dB	ACRF dB	PSACRF dB	RL dB
(MHz)	TIA Min	TIA Min	TIA Min	TIA Min
1	70.3	67.8	64.8	20.0
4	59.5	55.8	52.8	23.0
8	53.4	49.7	46.7	24.5
10	51.3	47.8	44.8	25.0
16	46.7	43.7	40.7	25.0
20	44.3	41.8	38.8	25.0
25	41.8	39.8	36.8	24.3
31.25	39.2	37.9	34.9	23.6
62.5	30.0	31.9	25.9	21.5
100	22.5	27.8	24.8	20.1
200	8.8	21.8	18.8	18.0
250	3.5	19.8	16.8	17.3

Cable measurements performed on 100m cable sample removed from the reel or packaging, laid out along a non-conducting surface supported in aerial spans in accordance with ANSI/TIA-568-C.2.

Marking

FURUKAWA GIGALAN U/UTP 23AWGx4P OUTDOOR JACKET VERIFIED TO TIA-568-C.2 CATEGORY 6 --- YAAMMDDHHmm {1}

Where:

{1} - Decreasing length (305 - 001 m)

Y- Manufacturing Process

YYMMDDHHmm: YY-Year, MM-Month, DD - Day, HH - Hour, mm - minute

Package

Plastic spool

305m