



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	Between two pairs	Between a pair and shield
	1000 VDC/3s	500 VDC/3s

NVP 68%

Transmission Performance

Freq. (MHz)	IL dB	NEXT dB	PSNEXT dB	ACR dB
	TIA Máx	TIA Min	TIA Min	TIA Min
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. (MHz)	PSACR dB	ACRF dB	PSACRF dB	RL dB
	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 24AWGx4P 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