



CATEGORY 5e U/UTP OUTDOOR PE CABLE JACKET

Product Type LAN Cable

Product Family MultiLan

Construction

RoHS-2 Compliant
Category 5e
U/UTP (Unshielded)
Polyethylene Jacket

General Characteristics

Features 4 twisted-pair cable, using solid bare copper conductor 24 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

- Exceeds physical and electrical requirements of EIA/TIA -568-c.2
- Cable according with RoHS directive (Restriction of Hazardous Substances)
- Can be used with all of the following protocols.
 - GIGABIT ETHERNET, IEEE 802.3z, 1000 Mbps;
 - 100BASE-TX, IEEE 802.3u, 100 Mbps;
 - 100BASE-T4, IEEE 802.3u, 100 Mbps;
 - 100vg-AnyLAN, IEEE802.12, 100 Mbps;
 - ATM -155 (UTP), AF-PHY-OO15.000 y AF-PHY-0018.000, 155/51/25 Mbps;
 - TP-PMD, ANSI X3T9.5, 100 Mbps;
 - 10BASE-T, IEEE802.3, 10 Mbps;
 - TOKEN RING, IEEE802.5, 4/16 Mbps;
 - 3X-AS400, IBM, 10 Mbps;
 - POWER OVER ETHERNET, IEEE 802.3af
- Solutions: Data Center, Commercial Building, Government, Financial, Health, Education.

Standards Compliance ANSI/TIA-568-C.2, ISO/IEC 11801, EN 50173-1, EN50288-3-1 and ICEA S-90-661.

Constructive characteristic

Conductor Solid bare copper with nominal diameter 24AWG.

Insulation High density Polyethylene nominal diameter 0.94mm

Insulation Resistance 10000 MΩ/km

Number of Pairs 4 pairs 24 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 four pairs are cabled together in such way to reduce electromagnetic interferences making the cable lay-up.

Shield

Unshielded (U/UTP).

Sheath

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

Nominal Diameter

5.0mm

Color

Black polyethylene jacket

Cable Weight

26 kg/km

Physical Characteristics
Installation Temperature

0°C up to 50°C

Storage Temperature

-20°C up to 70°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

25 ns/100 m

Dielectric strength

2500 VDC/3s

NVP

68%

**Transmission
Performance**

Freq. (MHz)	Return Loss (dB)		Insertion Loss (dB/100m)		NEXT (dB)		PSNEXT (dB)	
	Min	Typical	Max	Typical	Min	Typical	Min	Typical
1	20,0	35.7	2.1	1.7	65.3	83.1	62.3	76.8
4	23,0	39.1	4,0	3.6	56.3	74.8	53.3	67.8
8	24.5	36.3	5.7	5.1	51.8	70,0	48.8	63.4
10	25,0	35.1	6.3	5.7	50.3	68.6	47.3	61.7
16	25,0	36,0	8,0	7.3	47.2	63.4	44.2	57.4
20	25,0	37.5	9,0	8.3	45.8	63.7	42.8	57.6
25	24.3	37.7	10.1	9.3	44.3	61,0	41.3	54.3
31.25	23.6	34.8	11.4	11.1	42.9	60.7	39.9	53.7
62.5	21.5	34.1	16.5	15,0	38.4	55.4	35.4	49.3
100	20.1	32.3	21.4	19.3	35.3	51.9	32.3	45.2
200				23.7		50,0		43,0
250				27.5		47,0		40,0
300				31.1		44,0		37,0
350				37.4		41,0		34,0

Freq. (MHz)	ACRF (dB)		PSACRF (dB)		Delay Skew	Propagation Delay
	Min	Typical	Min	Typical		
1,0	64,0	84.8	61,0	76.5	45ns/100m	570,0
4,0	52,0	74.2	49,0	65.3		552,0
8,0	45.9	68.1	42.9	59.2		547,0
10,0	44,0	66.5	41,0	57.4		545,0
16,0	39.9	61.4	36.9	53.2		543,0
20,0	38,0	59.7	35,0	51.3		542,0
25,0	36,0	56.8	33,0	48.9		541,0
31.25	34.1	53.3	31.1	45.6		540,0
62.5	28.1	47.9	25.1	40.2		539,0
100,0	24,0	43.3	21,0	35.7		538,0
200,0		40,0		31,0		
250,0		37,0		29,0		
300,0		35,0		27,0		
350,0		31,0		24,0		

Note: Cable measurements performed on cable samples of 100m (328ft) removed from the reel or packing, laid out along a non-conducting surface supported in aerial spans in accordance with ANSI/TIA 568-B.2-1.

Marking

FURUKAWA MULTILAN U/UTP 24AWGX4P OUTDOOR JACKET VERIFIED TO TIA-568-C.2
CATEGORY 5E YAAMMDDHHmm (**) m "
Traceability:
Y- Manufacturing Process
AAMMDDHHmm :AA-Year, MM-Month, DD - Day, HH - Hour, mm - minute

Package

Plastic spool

Standard Length

305 meters

Warranty

12 months
