Cat. 5e 4x2x24/1 AWG F/UTP USE+ CPE jacket

Part Number: **83912P4101**

Applications:	Outdoor installations, Low temperature Indoor/Outdoor applications, Indoor/Outdoor use, fixed installations, Low temperature, outdoor fixed installations
General Construction:	4 twisted pairs cabled together, shielded with a polyester-aluminum tape and a drain conductor, jacketed with FR-PVC compound and an outer CPE USE+ complying compound, render the cable suitable for outdoor use in solar farms and harsh outdoor applications.
Outer Jacket Material:	CPE
Outer Diameter:	8.3 mm nom.
Weight:	74 kg/km

Design & Materials

Detailed Construction:
Internal cable OD is compatible to industrial RJ45 connectors, thus the cable can be direct terminated with RJ45 plug for ease of use in communication cabinets.
The cable is rated 600 volt USE+ application 90 ^{o}C, however the cable is not intended for mains supply.

Conductor Material:	Bare Copper
Conductor Size:	24 AWG
Conductor Size:	0.51 mm
Conductor Construction:	Solid
Insulation Material:	Solid PO
Insulation O.D.:	1.07 mm nom.
Conductor unit identification:	Solid/stripe
Color code:	Per TIA/EIA 568-B
Overall Shield Design:	100% Coverage
Overall Shield Material:	Aluminum/Polyester Foil
Overall Foil Shield:	Yes
Overall Drain-wire Material:	Tinned Copper
Overall Drain-wire size:	0.41 mm
Overall Drain-wire Construction:	Solid
Inner Jacket Material:	FR-PVC
Inner Jacket Diameter nom.:	6.1 mm nom
Inner Jacket Color:	Light Gray - or per request
Total number of conductors:	8
Outer Jacket Color:	Black
Marking:	Teldor Standard, Per request

Standards

Applicable Standards:	IEC 61156, TIA/EIA-568, RoHS 2002/95/EC
Flamability Rating:	IEC 60332-1, UL 1581 VW-1

Electrical Properties:
Cat. 5e Horizontal Cables *

Freq. MHz	Attenuation dB/100m 20°C		PS NEXT Loss dB		NEXT Loss dB		RL dB		PS ELFEXT dB		ELFEXT dB	
	Typical Value	Cat. 5e	Typical Value	Cat. 5e	Typical Value	Cat. 5e	Typical Value	Cat. 5e	Typical Value	Cat. 5e	Typical Value	Cat. 5e
1	2.0	2.1	68.3	62.3	71.3	65.3	22.0	20.0	64.0	61.0	67.0	64.0
4	3.9	4.1	59.3	53.3	62.3	56.3	25.0	23.0	52.0	49.0	55.0	52.0
10	6.2	6.5	53.3	47.3	56.3	50.3	28.0	25.0	44.0	41.0	47.0	44.0
20	8.8	9.3	48.8	42.8	51.8	45.8	28.0	25.0	38.0	35.0	41.0	38.0
30	10.9	11.5	46.1	40.1	49.1	43.1	27.0	23.8	35.0	31.5	38.0	34.5
60	15.8	16.6	41.6	35.6	44.6	38.6	24.0	21.1	28.0	25.4	31.0	28.4
100	21.0	22.0	38.3	32.3	41.3	35.3	22.0	18.8	24.0	21.0	27.0	24.0

*Supplied cables meet minimum Cat. 5e transmission requirements of **IEC 61156-5 Ed. 2** and **ANSI/EIA/TIA 568-B.2**

Performance

Frequency Range:	1 - 100 MHz
Impedance:	100 Ω
Coupling Attenuation:	Type II
Max. DC Resistance :	94 Ω/km@20°C
Max. Resistance Unbalance:	2 %
Capacitance Unbalance:	1.2 pF/m max.
Propagation Delay Skew:	35 ns/100m max.
Dielectric Strength:	700 V/minute
Dielectric Strength to Shield:	700 V/minute
Min. Insulation Resistance :	5 GΩ•km
Max. Tensile Strength - Short Term:	150 N
Min. Bend Radius:	85 mm
Max. Operating Temperature:	+90 °C
Min. Operating Temperature:	–40 °C
UV resistance:	Yes

Prepared By	Revised By	Version Num	Modified on
Jacob Ben Ary	Jacob Ben Ary	1.4	12-09-2011