

Industrial Ethernet Category 6 – 4 Pair Enhanced Unshielded Twisted Pair Cable



Applications:

- IEEE 802.3: 1000 BASE-T, 100 BASE-TX, 10 BASE-T, PoE, PoE+, PoE++
- CDDI, Token Ring, ATM
- Broadband and Baseband Analog Video
- Voice, T1
- Harsh Industrial Environments

Compliances:

- UL Verified to ANSI/TIA 568.2-D Category 6
- NEC/CEC Type: UL Listed CMX OUTDOOR - CMR
- NEC/CEC Type CMR (UL 1666)
- UL AWM Style 21047 (UL: 75°C, 600 V)
- UV RES per UL 444
- RoHS II Compliant (EU DIRECTIVE 2011/65/EU)

Features & Benefits:

- Third-party verified for guaranteed performance
- TRU-Mark® print legend
- Industrial-grade oil- and sunlight-resistant jacket

Print Legend:

**** FEET PRYSMIAN * GCRI450 INDUSTRIAL CAT 6
RISER 4PR 23AWG CMX OUTDOOR - CMR C(UL)US
75C VERIFIED (UL) ANSI/TIA-568.2-E CAT 6 AWM
21047 75C 600V --- FT4 OIL RES UV RES ##-##
#####

Construction:

Insulation

- HDPE

Shield Coverage

- Unshielded

Color Code

- Pair 1: Blue-White/Blue
- Pair 2: Orange-White/Orange
- Pair 3: Green-White/Green
- Pair 4: Brown-White/Brown

Rip Cord

- Polyester

Jacket

- Oil- and Sunlight- Resistant PVC

Jacket Colors

- Red, Black, Teal



Catalog Number	Spec Number	Nominal O.D.		Cable Weight Mft		No. Pairs	Cond. AWG Size	Jacket Thickness	
		Inches	mm	Lbs	kg			Inches	mm
GCRI450	7504	0.270	6.858	38	17	4	23	0.032	0.813

ELECTRICAL PERFORMANCE

Frequency MHz	PSACR (dB/100 m) (min)	ACRF (dB/100 m) (min)	Insertion Loss (dB/100 m) (max)	PSNEXT (dB) (min)	NEXT (dB) (min)	PSACRF (dB/100 m) (min)	ACR (dB/100 m) (min)	Return Loss (dB) (min)
1	75.3	72.8	2.0	77.3	79.3	69.8	77.3	20.0
4	64.5	60.7	3.8	68.3	70.2	57.7	66.5	23.6
10	56.4	52.8	5.9	62.3	64.3	49.8	58.4	26.0
16	51.7	48.7	7.5	59.3	61.3	45.7	53.8	26.0
20	49.4	46.7	8.4	57.6	59.8	43.7	51.4	26.0
31.25	44.3	42.9	10.6	54.9	56.9	39.9	46.3	26.0
62.5	35.1	36.8	15.3	50.4	52.4	33.8	37.1	25.5
100	27.6	32.8	19.7	47.3	49.3	29.8	29.6	22.5
150	20.0	29.3	24.7	44.7	46.7	26.3	22.0	21.6
200	13.8	26.8	29.0	42.8	44.8	23.8	15.8	21.0
250	8.7	24.8	32.6	41.3	43.3	21.6	10.7	20.5
350	—	21.9	39.5	39.2	41.2	18.9	1.7	19.8
500	—	18.8	48.6	36.6	38.8	15.8	—	19.0

Values over 350 Mhz are for informational purposes.

ELECTRICAL CHARACTERISTICS

Maximum DC Resistance	8.9 Ohms/100 m (328 ft) @ 20 °C
DC Resistance Unbalanced Individual Pair	3%
Maximum Mutual Capacitance	17 pF/ft @ 1 KHz
Maximum Delay Skew	45 ns/100 m
Nom. Velocity of Propagation	70% Speed of Light
Characteristic Impedance Frequency (f): 1-200 MHz	Ohms: 100 ± 15

MECHANICAL CHARACTERISTICS

Maximum Pulling Force	41 lbs.
Minimum Bend Radius	1.0"
Installation Temperature Rating	-20°C to +75°C
Operation Temperature Rating	-40°C to +75°C

GCRI450
0925