# Industrial Ethernet Category 6 - 4 Pair F/UTP Shielded Twisted Pair Cable



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

**Compliances:**
- UL Verified to ANSI/TIA 568-C.2 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 and Benefits:**
- Foil shield reduces electromagnetic interference (EMI) for optimal performance
- Third-party verified for guaranteed performance
- TRU-Mark® print legend contains footage markings from 1000' to 0'
- Industrial-grade oil- and sunlight-resistant jacket

**Print Legend:**
4 PAIR 23 AWG SCREENED TWISTED PAIR (SCTP) CABLE, FOR HIGH SPEED DATA TRANSMISSION AND IS TESTED TO 500 MHZ. THIS CABLE IS CMX OUTDOOR - CMR RATED AND UL VERIFIED TO CATEGORY 6 ELECTRICALS.

| CATALOG NUMBER | SPEC NUMBER | NOMINAL O.D. | | CABLE WEIGHT MFT | | NO. PAIRS | COND. AWG SIZE | PAIR COLOR CODE | INSULATION MATERIAL | SHIELD COVERAGE | RIPCORD | JACKET MATERIAL | JACKET THICKNESS | | JACKET COLORS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | INCHES | mm | LBS | kg | | | | | | | | INCHES | mm | |
| GCR1452 | 7505 | 0.385 | 8.509 | 46 | 21 | 4 | 23 | 1: Blue/White, Blue<br>2: Orange/White, Orange<br>3: Green/White, Green<br>4: Brown/White, Brown | HDPE | 100% Foil | Polyester | Oil- and Sunlight-Resistant PVC | 0.032 | 0.813 | Red, Black |

| Frequency (MHz) | Insertion Loss (dB/100 m) | Next (dB) | PSNext (dB) | ACR (dB/100 m) | PSACR (dB/100 m) | ACRF (dB/100 m) | PSACRF (dB/100 m) | Return Loss (dB) |
|---|---|---|---|---|---|---|---|---|
| | max. | min. | min. | min. | min. | min. | min. | min. |
| 1 | 2.1 | 74.3 | 72.0 | 72.2 | 70.2 | 67.8 | 64.8 | 20.0 |
| 4 | 3.8 | 65.3 | 63.3 | 61.5 | 59.5 | 55.8 | 52.8 | 23.6 |
| 10 | 5.9 | 59.3 | 57.3 | 53.4 | 51.4 | 47.8 | 44.8 | 26.0 |
| 16 | 7.5 | 56.2 | 54.2 | 48.8 | 46.8 | 43.7 | 40.7 | 26.0 |
| 20 | 8.4 | 54.8 | 52.8 | 46.4 | 44.4 | 41.8 | 38.8 | 26.0 |
| 31.25 | 10.5 | 51.9 | 49.9 | 41.4 | 39.4 | 37.9 | 34.9 | 25.5 |
| 62.5 | 15.0 | 47.4 | 45.4 | 32.4 | 30.4 | 31.9 | 28.9 | 23.5 |
| 100 | 19.1 | 44.3 | 42.3 | 25.2 | 23.2 | 27.8 | 24.8 | 22.5 |
| 150 | 23.7 | 41.7 | 39.7 | 18.0 | 16.0 | 24.3 | 21.3 | 18.9 |
| 200 | 27.6 | 39.8 | 37.8 | 12.2 | 10.2 | 21.8 | 18.8 | 18.0 |
| 250 | 31.1 | 38.3 | 36.3 | 7.2 | 5.2 | 19.8 | 19.8 | 17.3 |
| 300 | 34.3 | 37.1 | 35.1 | 2.9 | 0.9 | 18.3 | 18.3 | 16.8 |
| 400 | 40.1 | 35.3 | 33.3 | – | – | 15.8 | 15.8 | 15.9 |
| 500 | 45.3 | 33.8 | 31.8 | – | – | 13.8 | 13.8 | 15.2 |

Values over 350 Mhz are for informational purposes.

**ELECTRICAL CHARACTERISTICS**

| | |
|---|---|
| Maximum DC Resistance | 9.38 Ohms/100 m @ 20° C |
| Maximum DC Resistance Unbalance, Ind Pair | 4% |
| Maximum Mutual Capacitance | 17 pF/ft @ 1 KHz |
| Maximum Delay Skew | 35 ns/100 m |
| Nominal Velocity of Propagation | 70% Speed of Light |
| Characteristic Impedence (Frequency 1-350 MHz) | Ohms: 100±15 |

**MECHANICAL CHARACTERISTICS**

| | |
|---|---|
| Maximum Pulling Force | 40 lbs. |
| Minimum Bend Radius | 2.50" |
| Installation Temperature Rating | -20°C to +75°C |
| Operation Temperature Rating | -40°C to +75°C |

c UL us LISTED VERIFIED RoHS Compliant Directive 2011/65/EU TRU-MARK Made in U.S.A.

General Cable