



VERTICAL CABLE

CAT6 OUTDOOR CABLE

**CMX | WATER-RESISTANT | MESSENGER
23 AWG 8 CONDUCTOR (UTP)**

069-562/MESG

DESCRIPTION

550 MHz CAT6, Outdoor Aerial Unshielded, Direct Burial/CMX/Messenger, 4 Twisted Pairs (UTP) 8 23-AWG Solid Bare Copper Conductors

FEATURES

- Supports PoE Type 4 (IEEE 802.3bt) up to 100 W
- Galvanized Steel Messenger
- 23-AWG solid bare copper conductors
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801
- Outdoor- and UV-Resistant Jacket Material
- ETL Listed, RoHS Compliant
- 1000 ft Wooden Spool
- Weight: 40.7 lb (18.5 kg)

Compatible with VC RJ45 plugs

012-021-100 | 012-022-100

012-023/EZF-100 | 012-025/EZF-100

012-026/EZF-100



TRANSMISSION PERFORMANCE

Meets or exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 specifications

CONSTRUCTION

| | |
|---------------------|---|
| Pairs: | 4 |
| Conductors: | 8 |
| Rip Cord: | Nylon |
| Drain Wire: | Tinned Copper 0.02 in. (0.51 mm) |
| Separator Material: | Linear Low Density Polyethylene (LLDPE) |
| Screen: | Unscreened (UTP) |
| Messenger Diameter: | 0.05 in. (1.30 mm) |

CONDUCTORS

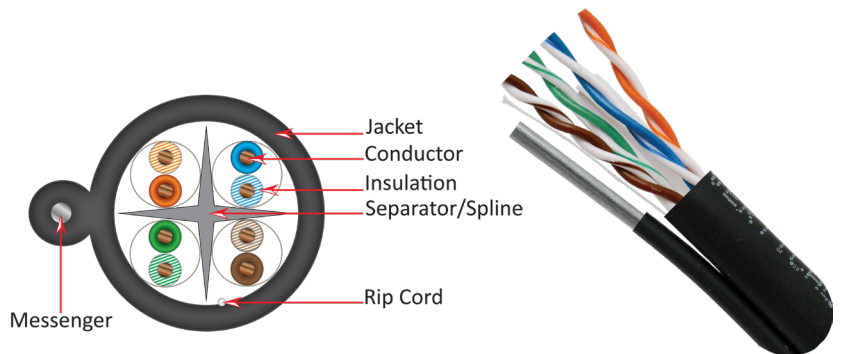
| | |
|-----------|----------------------------|
| Material: | Solid Bare Annealed Copper |
| Size: | 23 AWG |

INSULATION

| | |
|--------------------|--|
| Diameter: | 0.04 in (1.02 mm) |
| Average Thickness: | 0.009 in. (0.22 mm) |
| Color Coding: | Pair 1: Blue/White-Blue Pair 2: Orange/White-Orange Pair 3: Green/White-Green Pair 4: Brown/White-Brown |

JACKET

| | |
|--------------------|---|
| Material: | Linear Low Density Polyethylene (LLDPE) |
| Outer Rating: | UV-Resistant |
| Outdoor Diameter: | 0.25 in. x 0.10 in. (6.50 mm x 2.60 mm) |
| Average Thickness: | 0.03 in. x 0.025 in. (0.80 mm x 0.65 mm) |
| Marking: | VERTICAL 4001453 cETLus VERIFIED CMX UTP 4PR 23AWG OUTDOOR UV WITH MESSENGER CAT6 550MHz ANSI/TIA-568.2-D RoHS XXXXFT |



Florida (HQ)
800-749-2447

California
951-696-7772

New York
845-391-8318

Texas
713-322-7242

verticalcable.com

This specification sheet is subject to change without notice.



RoHS Intertek
Rev. 06/2026

ELECTRICAL CHARACTERISTICS

| | |
|---|---------------------|
| Voltage Rating: | 60 V _{RMS} |
| 1.0-250MHz Impedance (Ohms): | 100±15 |
| 1.0-250.0MHz Delay Skew (ns/100m): | <=45 |
| Pair-to-Ground Capacitance Unbalance (pF/100m): | <=330 |
| Max. Conductor DC Resistance 20°C (ohms/km): | 72.2 |
| Resistance Unbalance (%): | <=5 |

MECHANICAL

BEFORE

| | |
|---------------------------|-----------|
| Tensile Strength (MPa): | ≥10.6 MPa |
| Aging Elongation (%): | ≥300 |
| Aging Condition (°Cxhrs): | 100x168 |

AFTER

| | |
|----------------------------|----------------|
| Tensile Strength (MPa): | ≥85% of unaged |
| Aging Elongation (%): | ≥50% of unaged |
| Cold Bend (-20±2° Cx4hrs): | No Crack |

SAFETY

| | |
|----------------------------|-----|
| FPA 70 (NEC®) Fire Rating: | CMX |
|----------------------------|-----|

ENVIRONMENTAL

| | |
|------------------------|------------------------------|
| Operating Temperature: | -40 °F-167 °F (-40 °C-75 °C) |
|------------------------|------------------------------|

| Frequency (Mhz) | Return Loss (Min dB) | Attenuation (Max dB/100m) | Next (Min dB) | PSNEXT (Min dB) | ELFEXT (Min dB/100m) | Delay (Max ns/100m) |
|-----------------|----------------------|---------------------------|---------------|-----------------|----------------------|---------------------|
| 1 | 20.0 | 2.0 | 74.3 | 72.3 | 70.0 | 570.0 |
| 4 | 23.0 | 3.8 | 65.3 | 63.3 | 67.8 | 552.0 |
| 8 | 24.5 | 5.3 | 60.8 | 58.8 | 55.8 | 546.0 |
| 10 | 25.0 | 6.0 | 59.3 | 57.3 | 49.7 | 545.0 |
| 16 | 25.0 | 7.6 | 56.2 | 54.2 | 47.8 | 543.0 |
| 20 | 25.0 | 8.5 | 54.8 | 52.8 | 43.7 | 542.0 |
| 25 | 24.3 | 9.5 | 53.3 | 51.3 | 41.8 | 541.0 |
| 31.25 | 23.6 | 10.7 | 51.9 | 49.9 | 39.8 | 540.0 |
| 62.5 | 21.5 | 15.4 | 47.4 | 45.4 | 37.9 | 538.0 |
| 100 | 20.1 | 19.8 | 44.3 | 42.3 | 31.9 | 537.0 |
| 200 | 18.0 | 29.0 | 39.8 | 37.8 | 21.8 | 536.0 |
| 250 | 17.3 | 32.8 | 38.3 | 36.3 | 19.8 | 536.0 |
| 300 | 16.8 | 36.4 | 39.2 | 37.2 | 18.2 | 535.0 |
| 400 | 15.9 | 43 | 37.3 | 35.3 | 15.7 | 534.0 |