

# CAT6 OUTDOOR AERIAL CABLE CMX / WATERPROOF / MESSENGER 23 AWG 8 CONDUCTOR (UTP)



**VERTICAL CABLE**  
*Simply Connect.*

## DESCRIPTION

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

## FEATURES

- Supports 10/100/1000BASE-T applications
- Fast Ethernet and 155Mbps TP-PMD/CDDI
- Outdoor UV-resistant / Waterproof jacket
- Direct Burial / Aerial Applications
- Galvanized Steel Messenger
- 550-MHz bandwidth supporting wide range of applications
- 23 AWG Solid Copper Conductors
- Easily identifiable pair insulation colors
- Exceeds ANSI/TIA-568.2-D and ISO/IEC 11801 specifications
- CAN/CSA-C22.2 No. 214, RoHS compliant
- ETL listed



## 069-562/MESG

### 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): 0.016 in. (0.40 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: 0.0401 in. (1.02 mm)  
Average thickness: 0.0088 in. (0.22 mm)  
Color coding: **Pair 1:** White-Blue/Blue **Pair 2:** White-Orange/Orange  
**Pair 3:** White-Green/Green **Pair 4:** White-Brown/Brown

### JACKET

Material: Linear Low Density Polyethylene (LLDPE)  
Outdoor rating: UV-resistant  
Outer 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

### ELECTRICAL

Voltage rating: 60 V<sub>RMS</sub>

### MECHANICAL

Before Tensile Strength (Mpa): ≥10.6 MPa  
Elongation After Aging (%): ≥300  
Aging Conditions (° C x h): 100x168  
Tensile Strength After Aging (Mpa): ≥85% of unaged  
Elongation After Aging (%): ≥50% of unaged  
Cold Bend (-40±2° Cx4hrs): No Crack

### SAFETY

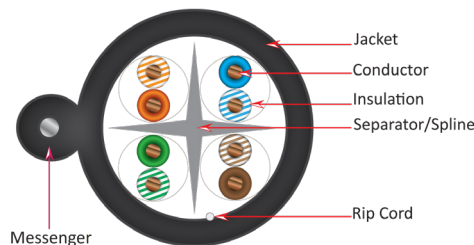
FPA 70 (NEC®) fire rating: CMX

### ENVIRONMENTAL

Operating temperature: -40 °F–167 °F (-40 °C–75 °C)

### WEIGHT

40.7 lb (18.5 kg)



**VERTICAL CABLE**

951.696.7772 California  
800.749.2447 Florida  
845.391.8318 New York  
713.322.7242 Texas



verticalcable.com

Rev. 03/2025

Subject to change without notice.

# CAT6 OUTDOOR AERIAL CABLE

## CMX / WATERPROOF / MESSENGER

### 23 AWG 8 CONDUCTOR (UTP)

## PERFORMANCE

### ELECTRICAL CHARACTERISTICS

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

Frequency (Mhz)	Return Loss (Min db)	Attenuation Max	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

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