



VERTICAL CABLE

# CAT6 DIRECT BURIAL CABLE

CMX | WATER-RESISTANT | UV-RESISTANT  
23 AWG 8 CONDUCTOR (F/UTP)

## 069-556/CMXT2K

### DESCRIPTION

550 MHz CAT6, Waterproof Outdoor Dual Jacket, Direct Burial/CMX/Overall Shield, 4 Twisted Pairs (F/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/Shielded/Dual Jacket
- 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 compliant
- RoHS compliant, ETL-listed
- 2,000 ft. wooden spool
- Weight: 96 lb (43.5 kg)



### TRANSMISSION PERFORMANCE

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

### CONSTRUCTION

Pairs:	4
Conductors:	8
Rip Cord:	Nylon
PE Tape:	1
Drain Wire:	Tinned Copper / 0.016 in. (0.4 mm)
Separator Material:	Low-Density Polyethylene (LDPE)
Screen:	Aluminum Foil (F/UTP)
Twisted Pair Diameter:	0.08 in. (1.96 ±0.02 mm)
Assembly Diameter:	0.197 in. (5 mm)

### CONDUCTORS

Material:	Solid Bare Annealed Copper
Size:	23 AWG
Outer Diameter:	0.022 in. (0.56 mm)

### INSULATION

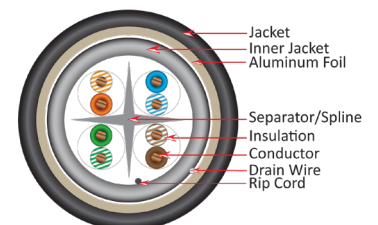
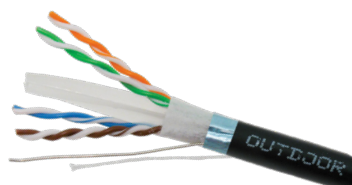
Material:	HDPE
Diameter:	0.039 in. (0.98 ±0.01 mm)
Average Thickness:	0.008 in. (0.21 mm)
Min. Point Thickness:	0.007 in. (0.19 mm)
Color Coding:	Pair 1: White-Blue/Blue Pair 2: White-Orange/Orange Pair 3: White-Green/Green Pair 4: White-Brown/Brown

### INNER JACKET (GRAY)

Material:	Polyvinyl Chloride (PVC)
Outer Diameter:	0.23 in. (5.8 mm ±0.2 mm)
Average Thickness:	0.016 in. (0.4 mm)
Min. Point Thickness:	0.014 in. (0.36 mm)

### OUTER JACKET (BLACK)

Material:	Linear Low Density Polyethylene (LLDPE)
Outdoor Rating:	UV-Resistant
Outdoor Diameter:	0.3 in. (7.6 ±0.2 mm)
Average Thickness:	0.024 in. (0.60 mm)
Min. Point Thickness:	0.021 in. (0.54 mm)
Marking:	VERTICAL 4001453cETLus VERIFIED F/UTP 4PR 23AWG OUTDOOR DIRECT BURIAL UV LLDPE CAT6 550MHz CMX 75C 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

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This specification sheet is subject to change without notice.



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## ELECTRICAL CHARACTERISTICS

Voltage Rating*:	300 V <sub>RMS</sub>
Characteristics Impedance (1-250 MHz):	100±15 ohms
Delay Skew:	≤45 (nS/100m)
Pair to Ground Capacitance Unbalance:	≤330 (Pf/100m)
Max. Conductor DC Resistance:	74.3 (ohms/km) @ 20°C
Resistance Unbalance:	≤5%

## MECHANICAL

Test Object	Jacket (LLDPE)
Before Aging-	
Tensile Strength (Mpa):	≥10.8
Elongation (%):	≥300
Aging Conditions (°C × hrs):	100x168
After Aging-	
Tensile Strength (Mpa):	≥85% of unaged
Elongation (%):	≥50% of unaged
Cold Bend (-20±2°C x 4hrs):	No Crack
Maximum Pulling Force:	100 N
Minimum Bending Radius:	8XOD

## SAFETY

FPA 70(NEC®) fire rating:	CMX
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## ENVIRONMENTAL

Operating Temperature:	-40 °F to 167 °F (-40 °C to 75 °C)
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\*Conductors will handle up to PoE type 4 voltages 60 V, insulation material will handle up to 300 V.

## PERFORMANCE TEST CHART

Frequency (MHz)	Return loss (Min dB)	Attenuation Max	NEXT (Min dB)	PSNEXT Min (dB)	Frequency (MHz)	ACR-F Min (dB)	PSACR-F Min (dB)	Delay Max (ns/100m)
1	20.0	2.0	74.3	72.3	1	67.8	64.8	570.0
4	23.0	3.8	65.3	63.3	4	55.8	52.8	552.0
8	24.5	5.3	60.8	58.8	8	49.7	46.7	546.7
10	25.0	6.0	59.3	57.3	10	47.8	44.8	545.4
16	25.0	7.6	56.2	54.2	16	43.7	40.7	543.0
20	25.0	8.5	54.8	52.8	20	41.8	38.8	542.0
25	24.3	9.5	53.3	51.3	25	39.8	36.8	541.2
31.25	23.6	10.7	51.9	49.9	31.25	37.9	34.9	540.4
62.5	21.5	15.4	47.4	45.4	62.5	31.9	28.9	538.6
100	20.1	19.8	44.3	42.3	100	27.8	24.8	537.6
200	18.0	29.0	39.8	37.8	200	21.8	18.8	536.5
250	17.3	32.8	38.3	36.3	250	19.8	16.8	536.3
300	16.8	36.4	37.1	35.1	300	18.3	15.3	536.1
400	15.9	43.0	35.3	33.3	400	15.8	12.8	535.8
500	15.2	48.9	33.8	31.8	500	13.8	10.8	535.6

\*Values above 250MHz are for information purposes only.

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