

# Show Me

## CABLES

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# CAT6A Indoor/Outdoor Bulk Ethernet Cable, UV Resistant, Shielded CMX/CMR- Black UV Resistant

SKU: 85-665-417 BK

Category 6A Indoor/UV-Outdoor F/UTP 23 AWG  
4 Pair 8 Solid Bare Copper Conductors, AL Foil  
Shielded, Black UV Resistant CMR/CMX PVC Jacket  
1000FT (ETL).

### Applications

- 10/100/1000Base-T
- 100Base-VG
- 155 Mbps and 622-Mbps ATM
- Other high-performance applications
  - Aerial Applications
  - Outdoor Applications
  - Antennas

### Compliance

- Reference Standard: CMR, CMX
- ANSI/TIA/EIA-568-C.2-10 Category 6A
- UL 444
- ETL Listed
- RoHS Compliant

### Physical Characteristics

- Conductor Size: 23AWG
- Conductor Material: Solid Bare Copper
- Insulation Material: High Density Polyethylene (HDPE)
- Insulation Diameter: 1.08 ± 0.01mm
- Number of Conductors: 8 Conductors
- Number of Pairs: 4 Pairs
- Outer Shield Material: Aluminum Foil
- Drain Wire: Yes, Tinned Copper
- Outer Jacket Material: FR-PVC (UV)
- Outer Jacket Diameter: 8.00mm ± 0.2mm
- Outer Jacket Rip Cord: Yes

### Pair Color Code Chart

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

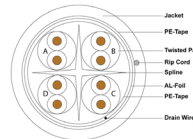
### Mechanical Characteristics

- Storage Temperature Range: -20~+60°C
- Installation Temperature Range: -20~+60°C
- Operating Temperature Range: 0~+50°C
- Bulk Cable Weight: N/A / 1000FT
- Max. Recommended Pulling Tension: 110N
- Min. Bend Radius/Minor Axis: 32mm
- Min. Bend/Installation: 65mm
- Test Object: Jacket
- Test Material: PVC
- Before Tensile Strength: ≥13.8
  - Aging Elongation: ≥100
  - Aging Condition: 100°C x 24hrs x 7Days
- After Tensile Strength: ≥75% of unaged
  - Aging Elongation: ≥75% of unaged
  - Cold Bend: No Visible Cracks (-20°C x 4h)
- 300 Hours Weatherometer Test: Pass

# CAT6A



### Technical Diagram



### Available Jacket Colors

- Black Item# C6AXR-1167BK

### Cable Features

- Tested to 750MHz.
- Meets or exceeds CAT6A TIA568C.2 standards.
- Cable is marked in descending order so you always know how much cable is left.
- Extra headroom provides room for growth.
- Low attenuation and power-sum crosstalk.

### Construction Facts

- This Indoor/Outdoor Cable has high density polyethylene insulation.
- Longitudinal rip cord for easy jacket opening.

### Cable Put-Ups:

- Cable is supplied in 1000ft increments in a pull box or on a wooden spool.

### Electrical Characteristics

- Nom. Mutual Capacitance: 46pF/m
- Pair to Ground Capacitance Unbalance: ≤ 330 (pF/100m)
- Nominal Velocity of Propagation: 69%
- Maximum Propagation Delay: 534+36 (ns/100m)
- Maximum Delay Skew: 25ns/100m
- Maximum Conductor DC Resistance: 90 (@ 20°C ohm/km)
- Maximum DCR Unbalance: ≤ 3.5%
- Attenuation (Maximum)
  - 34.3dB/100m (328.1ft.) @ 300MHz
  - 56.8dB/100m (328.1ft.) @ 750MHz
- 100 - 350MHz Impedance: 100Ω ± 15
- 350 - 750MHz Impedance: 100Ω ± 22
- NEXT (Minimum)
  - 41.1dB/100m (328.1ft.) @ 300MHz
  - 35.2dB/100m (328.1ft.) @ 750MHz
- PS-NEXT (Minimum)
  - 39.1dB/100m (328.1ft.) @ 300MHz
  - 33.2dB/100m (328.1ft.) @ 750MHz
- Return Loss (Minimum)
  - 31.8dB/100m (328.1ft.) @ 100MHz
  - 17.8dB/100m (328.1ft.) @ 500MHz

Sequential foot markers on jacket.

### CAT6A 750MHz Indoor/Outdoor Solid Bulk Cable Electrical Specifications

Frequency MHz (Maximum)	ATT dB/100 m (328 ft.) (Maximum)	ACRF dB/100 m (328 ft.) (Maximum)	DELAY ns/100 m (328 ft.) (Minimum)	NEXT dB/100 m (328 ft.) (Minimum)	PS-NEXT dB/100 m (328 ft.) (Minimum)	ELFEXT dB/100 m (328 ft.) (Minimum)	PS-ELFEXT dB/100 m (328 ft.) (Minimum)	Return Loss dB (Minimum)
1	2.1	71.8	570.0	74.3	72.3	71.8	N/A	20.0
4	3.8	59.8	552.0	65.3	63.3	59.8	N/A	23.0
8	5.3	53.7	546.7	60.8	58.8	53.7	N/A	24.5
10	5.9	51.8	545.4	59.3	57.3	51.8	N/A	25.0
16	7.5	47.7	543.0	56.2	54.2	47.7	N/A	25.0
20	8.4	45.8	542.0	54.8	52.8	45.8	N/A	25.0
25	9.4	43.8	541.2	53.3	51.3	43.8	N/A	24.3
31.25	10.5	41.9	540.4	51.9	49.9	41.9	N/A	23.6
62.5	15.0	35.9	538.6	47.4	45.4	35.9	N/A	21.5
100	19.1	31.8	538.0	44.3	42.3	31.8	N/A	22.0
200	27.6	25.8	537.0	43.8	41.8	25.8	N/A	20.0
250	31.1	23.8	536.0	42.3	40.3	23.5	N/A	19.3
300	34.3	22.3	536.0	41.1	39.1	22.3	N/A	18.8
500	45.3	17.8	536.0	37.8	35.8	17.8	N/A	17.0
600	50.1	N/A	N/A	36.6	34.6	N/A	N/A	16.6
750	56.8	N/A	N/A	35.2	33.2	N/A	N/A	16.0