



**VERTICAL CABLE**

# CAT6 CMP CABLE

UTP | MADE IN THE USA | ETL-LISTED

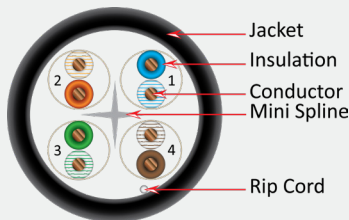
## 166 SERIES

### DESCRIPTION

**CAT6 UTP CMP (Plenum-Rated) ETL-Listed, RoHS-Compliant 1000 ft Pull-Box - Made in the USA**

### FEATURES

- 4-Pair Unshielded Twisted-Pair (UTP) Construction
- Plenum Fire Safety Rating (CMP)
- 23 AWG Bare Copper Conductors
- Easy-to-See Vivid-Color Conductor Insulation and Cable Jacket
- Moisture-Resistant Box equipped with easy-to-pull tube
- Supports 15W PoE (IEEE 802.3af), 30W PoE+ (IEEE 802.3at), and 60W PoE++ (IEEE 802.3bt Type 3)
- ETL-listed, ETL-Verified Channel, RoHS-Compliant
- Covered by 25-Year Warranty
- 1000 ft. Pull Box
- Weight: 27 lb. (12.25 kg)



PART NUMBERS			
166-250/P/BK	● (Black)	166-255/P/PK	● (Pink)
166-251/P/BL	● (Blue)	166-256/P/PR	● (Purple)
166-252/P/GR	● (Green)	166-257/P/RD	● (Red)
166-253/P/GY	● (Grey)	166-258/P/WH	○ (White)
166-254/P/OR	● (Orange)	166-259/P/YL	● (Yellow)

#### CONSTRUCTION

Size: Solid Bare Copper  
23 AWG  
Conductor Insulation: Fluoropolymer  
Insulation (all pairs): FEP 0.0074 - 0.0098 in. (0.190 mm)  
Stranding: Solid  
Spline: Fluoropolymer Mini Filler  
Insulation Color Coding: Pair 1: Blue/White-Blue Pair 2: Orange/White-Orange  
Pair 3: Green/White-Green Pair 4: Brown/White-Brown  
Number of Conductors: 8 (4 Pairs)  
Jacket Material: PVC: Plenum-Rated, Low-Smoke, Fire-Retardant  
Jacket Average Wall: 0.015 in. ± 0.002 (0.381 mm)  
Conductor Average DIA: 0.041 in. (1.04 mm)  
Cable Out DIA: 0.214 in. (5.435 mm) nom.

#### MARKING

4010346 CAT6 CMP-LP(0.5A) FT6 23 AWG 4PR UTP 75C TESTED TO 550 MHz c(ETL)us VERIFIED TO ANSI/TIA-568.2-D ISO-IEC 11801 MADE IN USA PO#/OP#/LOT#/CLX ROHS COMPLIANT XXXXFT-XXXXFT

#### COMPLIANCE

Safety: ETL-Listed (tested per UL 444)  
RoHS2 (Directive 2011/65/EU)  
Fire Safety: NEC CMP (tested per NFPA 262)  
Performance: ANSI/TIA-568.2-D (ETL-verified)

#### ELECTRICAL

Operating Voltage Rating: 300 V<sub>RMS</sub>  
DC Resistance/Conductor: 8.3 Ohms/100 m nom. @ 20 °C max.  
Resistance Unbalance: 0.5%  
Mutual Capacitance: 4.63 nF/100 m max.  
Input Impedance: 100 Ω ± 15%  
Nominal Impedance: 100 Ω ± 15% (100 MHz)  
± 20 Ω (100–250 MHz)  
± 25 Ω (251–500 MHz)

#### MECHANICAL

Max. Rec. Pull Tension: 25 lb (111 N)  
Min. Bend Radius: 0.9 in. min.  
Approx. Climate Weight: 28 lb/1 mft nom.

Florida (HQ)  
800-749-2447

California  
951-696-7772

New York  
845-391-8318

Texas  
713-322-7242

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Rev. 02/2026

## ENVIRONMENTAL

Storage Temperature:	100±15
Installation Temperature:	0° C to +50° C
Operating Temperature:	-20° C to +75° C
Operating Humidity:	≤93% RH non-condensing
Delay Skew:	11.08ns/100m
NVP:	73.8%

## APPLICATION SUPPORT

PoE:	15-W PoE Type 1 (IEEE 802.3af) 30-W PoE+ Type 2 (IEEE 802.3at) 60-W PoE++/4PPoE Type 3 (IEEE 802.3bt)
HDBase-T:	Class A – Class D
Ethernet:	10GBASE-T (IEEE 802.3an) 2.5GBASE-T/5GBASE-T (IEEE 802.3bz) 1000BASE-T (IEEE 802.3ab) Gigabit Ethernet 100BASE-TX (IEEE 802.3u) 100-Mbps Ethernet (Fast Ethernet)
ATM:	ATM LAN 25/51/155/622
ANSI:	ANSI X3T9.5 TP-PMD (FDDI)

AWG	Number of 4-Pair Cables in Bundle																				
	1			2-7			8-19			20-37			38-61			62-91			92-192		
	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C	60°C	75°C	90°C
24	2.0	2.0	2.0	1	1.4	1.6	0.8	1	1.1	0.6	0.7	0.9	0.1	0.1	0.7	0.4	0.5	0.6	0.3	0.4	0.5
23	2.5	2.5	2.5	1.2	1.5	1.7	0.8	1.1	1.2	0.6	0.8	0.9	0.5	0.7	0.8	0.5	0.7	0.8	0.4	0.5	0.6
22	3.0	3.0	3.0	1.4	1.8	2.1	1	1.2	1.4	0.7	0.9	1.1	0.6	0.8	0.9	0.6	0.7	0.8	0.5	0.6	0.7

ENG SWEEP TO 750MHZ, values above 550 MHz are for internal reference only.

Frequency (MHz)	Insertion Loss	Next	PS NEXT	ACR-N	PSACR-N	ACR-F	PSACR-F	Return Loss
1	1.7	97.5	91.3	95.8	89.5	96.4	90.7	34.5
4	3.5	90.2	83.1	86.7	79.6	88.2	80.7	31.1
8	4.9	84.8	78.5	79.8	73.6	79.2	73.0	31.9
10	5.5	79.3	74.0	73.8	68.4	75.0	69.7	32.8
16	7.0	80.1	74.4	73.1	67.4	72.9	65.8	32.8
20	7.9	83.2	73.2	75.3	65.3	72.2	65.1	34.9
25	8.9	77.9	72.5	69.0	63.2	67.1	60.8	33.4
31.25	10.0	78.9	70.8	69.0	60.9	64.9	57.8	31.5
62.5	14.4	71.0	65.2	56.7	50.8	58.9	50.7	34.2
100	18.4	64.5	58.0	46.2	39.6	52.1	44.4	32.0
250	30.0	58.6	52.9	28.7	22.9	34.1	27.6	25.0
300	33.0	60.4	54.5	27.5	21.5	28.7	23.2	22.5
400	38.8	58.5	51.2	19.7	12.4	19.9	11.0	20.0
500	44.0	58.0	50.9	14.1	6.9	11.7	5.7	20.6
550	46.2	52.8	45.0	6.6	1.2	10.7	4.6	19.9

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### Cable ID/ Test ID: CAT6-CMP-UTP

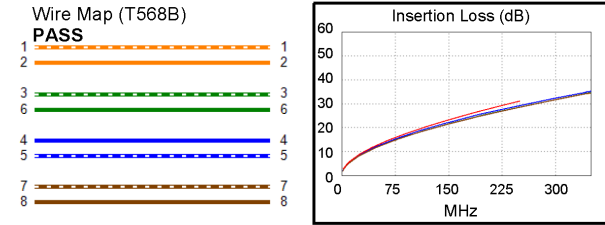
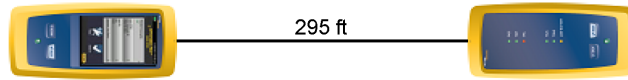
Test Limit: TIA Cat 6 Perm. Link (+PoE)  
 Limits Version: V7.11  
 Date / Time: 12/01/2025 08:57:31 AM  
 Operator: TY  
**Headroom 7.1 dB (NEXT 3,6-4,5)**  
 Cable Type: Cat 6 U/UTP  
 NVP: 72.0%

Main: Versiv  
 S/N: 1808023  
 Software Version: V6.13 Build 2  
 Calibration Date: 07/11/2025  
 Adapter: DSX-8000 (DSX-PLA804)  
 S/N: 23290282

### Test Summary: PASS

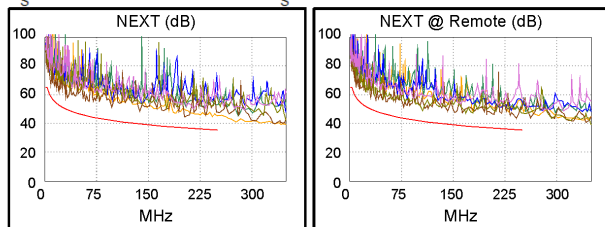
Remote: Versiv  
 S/N: 1807069  
 Software Version: V6.13 Build 2  
 Calibration Date: 07/11/2025  
 Adapter: DSX-8000R (DSX-PLA804)  
 S/N: 21331027

Length (ft), Limit 295	[Pair 1,2]	295
Prop. Delay (ns), Limit 498	[Pair 4,5]	446
Delay Skew (ns), Limit 44	[Pair 4,5]	30
Resistance (ohms), Limit 21.00	[Pair 3,6]	15.30
Resist. Unbal. (ohms), Limit 0.460	[Pair 3,6]	0.269
Resist. P2P Unbal. (ohms), Limit 0.510	[Pair 1,2-3,6]	0.337
Insertion Loss Margin (dB)	[Pair 4,5]	1.9
Frequency (MHz)	[Pair 4,5]	250.0
Limit (dB)	[Pair 4,5]	31.1

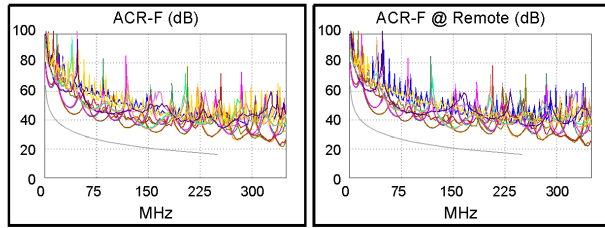


#### Worst Case Margin Worst Case Value

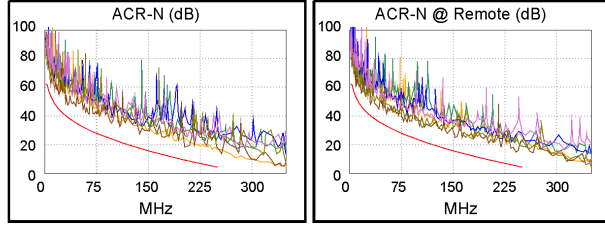
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-4,5
<b>NEXT (dB)</b>	7.1	7.3	7.8	7.8
Freq. (MHz)	8.9	30.4	203.0	241.0
Limit (dB)	58.6	50.2	36.8	35.6
Worst Pair	3,6	3,6	3,6	3,6
<b>PS NEXT (dB)</b>	8.4	8.5	8.4	9.5
Freq. (MHz)	206.0	107.5	206.0	240.0
Limit (dB)	34.1	38.8	34.1	33.0



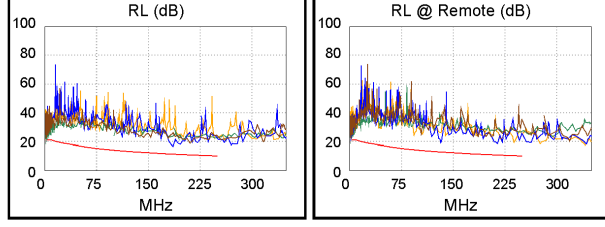
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-1,2	1,2-3,6	1,2-3,6	1,2-3,6
<b>ACR-F (dB)</b>	11.3	11.3	11.9	11.9
Freq. (MHz)	161.0	162.0	242.5	242.5
Limit (dB)	20.1	20.0	16.5	16.5
Worst Pair	1,2	1,2	1,2	1,2
<b>PS ACR-F (dB)</b>	13.1	13.2	14.2	14.5
Freq. (MHz)	202.5	203.5	240.0	242.5
Limit (dB)	15.1	15.0	13.6	13.5



N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	1,2-3,6	3,6-4,5
<b>ACR-N (dB)</b>	7.3	7.6	11.7	9.6
Freq. (MHz)	8.9	30.4	244.0	241.0
Limit (dB)	53.4	40.4	4.8	5.1
Worst Pair	3,6	3,6	3,6	4,5
<b>PS ACR-N (dB)</b>	9.2	9.6	12.5	11.4
Freq. (MHz)	8.9	30.5	249.5	241.0
Limit (dB)	51.1	37.9	1.7	2.5



PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6	3,6	4,5	4,5
<b>RL (dB)</b>	3.7	4.7	4.8	7.3
Freq. (MHz)	3.8	4.9	187.0	215.0
Limit (dB)	21.0	21.0	11.3	10.7



Compliant Network Standards:  
 10BASE-T      100BASE-TX      100BASE-T4  
 1000BASE-T      2.5GBASE-T      5GBASE-T  
 ATM-25      ATM-51      ATM-155  
 100VG-AnyLan      TR-4      TR-16 Active  
 TR-16 Passive

LinkWare™ PC Version 11.8

Project: DEFAULT  
 Site: Not Set  
 Floor: Not Set  
 Rack: Not Set  
 Untitled1

Building: Not Set  
 Room: Not Set  
 Patch: Not Set



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