



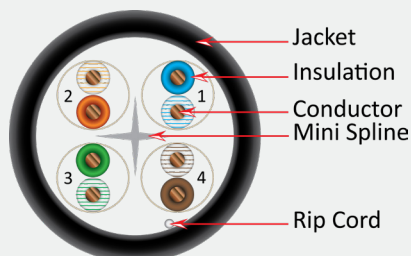
VERTICAL CABLE

DESCRIPTION

CAT6 CMP (Plenum-Rated) UTP,
ETL-Listed, PoE Type 3, 550 MHz, 23 AWG,
1000 ft, Pull Box

FEATURES

- 4-Pair Unshielded Twisted-Pair (UTP) Construction
- Plenum Fire Safety Rating (CMP)
- 23 AWG Bare Copper Conductors
- Supports High-Speed Data Applications
- Moisture-Resistant Box equipped with easy-to-pull tube
- Excellent Insertion Loss and Crosstalk Characteristics
- Supports PoE Type 3 (IEEE 802.3bt) up to 60 W
- ETL-listed, RoHS-Compliant
- Covered by 25-Year Warranty
- 1000 ft. Pull Box
- Weight: 27 lb. (12.25 kg)



CAT6 CMP CABLE

UTP | MADE IN THE USA | ETL-LISTED

166 SERIES

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

Solid Bare Copper
Size: 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. $\pm$ 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_{RMS}
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 $\pm$ 15%
Nominal Impedance: 100 Ω $\pm$ 15% (100 MHz)
 $\pm$ 20 Ω (100–250 MHz)
 $\pm$ 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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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
NEXT (dB)	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
PS NEXT (dB)	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

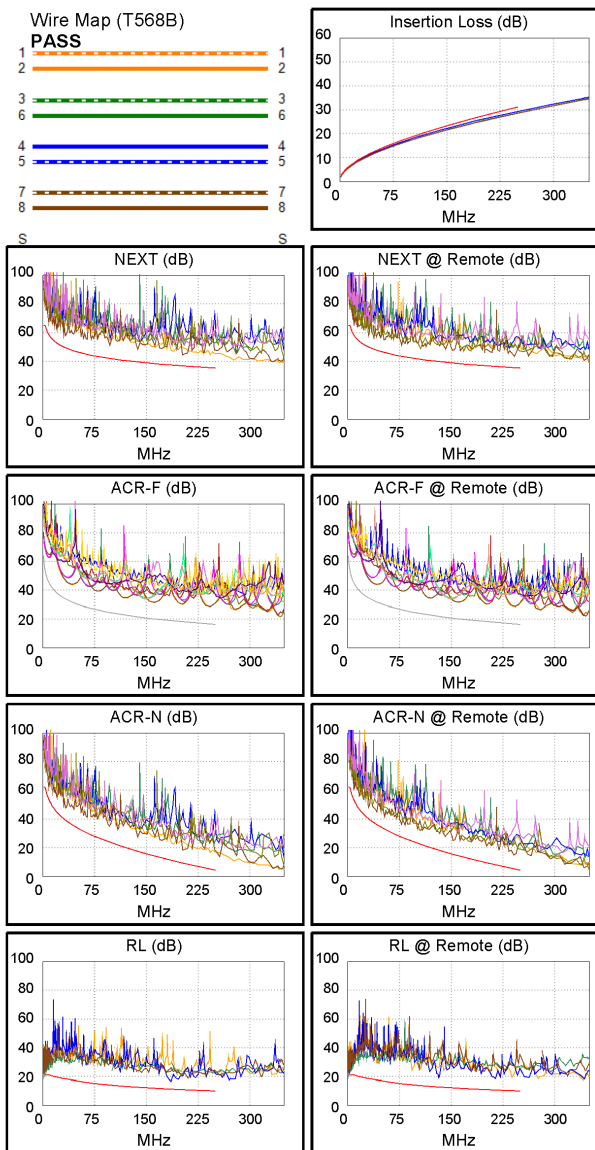
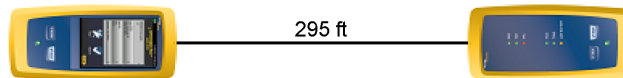
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-1,2	1,2-3,6	1,2-3,6	1,2-3,6
ACR-F (dB)	11.3	11.3	11.9	11.9
Freq. (MHz)	161.0	162.0	242.5	242.5
Limit (dB)	20.1	20.0	16.5	16.5
Worst Pair	1,2	1,2	1,2	1,2
PS ACR-F (dB)	13.1	13.2	14.2	14.5
Freq. (MHz)	202.5	203.5	240.0	242.5
Limit (dB)	15.1	15.0	13.6	13.5

N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	1,2-3,6	3,6-4,5
ACR-N (dB)	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
PS ACR-N (dB)	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
RL (dB)	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
100BASE-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

FLUKE
 networks

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