

CAT3 VOICE GRADE CABLE

CMR RATED / 50 PAIR

24 AWG 100 CONDUCTOR (UTP)

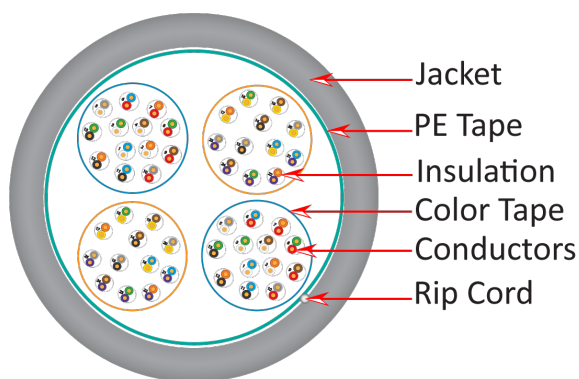


DESCRIPTION

CAT3 Multi-Pair, CMR Rated / Unshielded (UTP)
50 Twisted Pairs, 24 AWG Solid Bare Copper
Conductors.

FEATURES

- Suitable for telephony communication
- Excellent attenuation and crosstalk characteristics
- 50 Pairs housed together with varying lays
- 24 AWG solid copper conductors
- Easily identifiable pair insulation colors
- RoHS (2011/65/EU) compliant
- ETL-listed



052-442GY

TRANSMISSION PERFORMANCE

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

CONSTRUCTION

Pairs:	50
Conductors:	100
PE Tape:	Yes
Nylon Tape:	Yes
Screen:	Unscreened (UTP)
Assembly Diameter:	0.55 in. (14 mm)

CONDUCTORS

Material:	Solid Bare Annealed Copper
Size:	24 AWG
Diameter:	0.019 in. (0.475 ± 0.005 mm)

INSULATION

Material:	PVC
Diameter:	0.035 in. (0.88 ± 0.01 mm)
Average Thickness:	0.008 in. (0.203 mm)
Minimum Point Thickness:	0.007 in. (0.182 mm)

TWISTED PAIR

Diameter:	0.07 in. (1.76 ± 0.02 mm)
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JACKET

Material:	Polyvinyl Chloride (PVC)
Outer Diameter:	0.64 in. (16.20 mm)
Average Thickness:	0.04 in. (1 mm)
Minimum Point Thickness:	0.035 in. (0.9 mm)
Rip Cord:	Nylon
Marking:	VERTICAL 4001453 cETLus VERIFIED CMR UTP 50PR 24 AWG CAT3 ANSI/TIA-568.2-D RoHS V1379PXXXXX XXXXFT

VERTICAL CABLE

951.696.7772 California
800.749.2447 Florida
845.391.8318 New York
713.322.7242 Texas



verticalcable.com

Rev. 10/2025

Subject to change without notice.

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CMR RATED / 50 PAIR

24 AWG 100 CONDUCTOR (UTP)

CABLE CORE

Total Mylar Spiral:

≥125%

Color Coding (25 Twisted Pairs x 2)*:

Pair 1: Blue/White	Pair 6: Red/Blue	Pair 11: Black/Blue	Pair 16: Yellow/Blue	Pair 21: Purple/Blue
Pair 2: White/Orange	Pair 7: Red/Orange	Pair 12: Black/Orange	Pair 17: Yellow/Orange	Pair 22: Purple/Orange
Pair 3: White/Green	Pair 8: Red/Green	Pair 13: Black/Green	Pair 18: Yellow/Green	Pair 23: Purple/Orange
Pair 4: White/Brown	Pair 9: Red/Brown	Pair 14: Black/Brown	Pair 19: Yellow/Brown	Pair 24: Purple/Orange
Pair 5: White/Gray	Pair 10: Red/Gray	Pair 15: Black/Gray	Pair 20: Yellow/Gray	Pair 25: Purple/Gray
*Color of Tape:	U12-1 - Blue	U12-2 - Orange	U13-1 - Blue	U13-2 - Orange

ELECTRICAL

Voltage Rating:

30 V RMS

Impedance (1-100 MHz):

100 ±15 Ω

Delay Skew (1-100 MHz):

≤45 ns/100m

Pair-to-Ground Capacitance Unbalance:

≤330 pF/100m

Max Conductor DC Resistance @ 20°C:

105 Ω/km

DC Resistance Unbalance:

≤5%

Frequency (MHz)	Return loss (Min dB)	Attenuation (dB/100m)	Delay (ns/100m)	NEXT (Min dB)
1	12	2.6	570	41.3
4	12	5.6	552	32.3
8	12	8.5	545	27.8
10	12	9.7	545	26.3
16	10	13.1	543	23.3

MECHANICAL

Test Object:

Jacket

Test Material

PVC

Tensile Strength (Before Aging) (Mpa):

≥13.8

Elongation (Before Aging) (%):

≥100

Aging Condition (°C × hrs)

100×168

Tensile Strength (After Aging) (Mpa):

≥85% of unaged

Elongation (After Aging) (%):

≥50% of unaged

Cold Bend (-20±2°C × 4hrs):

No Crack

ENVIRONMENTAL

Operating Temperature Rating:

-40 °F to +167 °F (-40 °C to +75 °C)

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