



CAT3 VOICE GRADE CABLE

CMR RATED / 50 PAIR

24 AWG 100 CONDUCTOR (UTP)

052-442GY

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

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 ± 0.005 mm)
Average Thickness:	0.008 in. (0.203 mm)
Minimum Point Thickness:	0.007 in. (0.183 mm)

TWISTED PAIR

Diameter:	0.07 in. (1.76 ± 0.01 mm)
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CABLE CORE

Total Mylar Spiral:	≥125%
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Color Coding: (25 Pairs x 2)*

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

*Color of tape:

U12-1 - Blue
U12-2 - Orange
U13-1 - Blue
U13-2 - Orange

JACKET

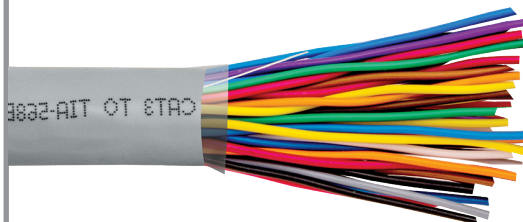
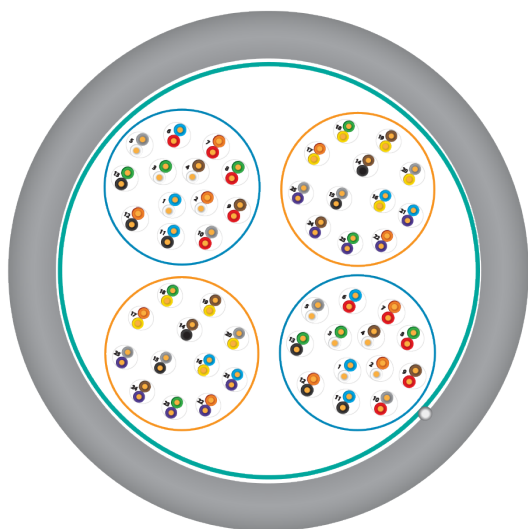
Material:	Polyvinyl Chloride (PVC)
Outer Diameter:	0.64 in. (16.20 mm)
Average Thickness:	0.04 in. (1 mm)
Minimum Point Thickness:	0.035 in. (0.9 mm)
Rip Cord:	Nylon
Marking:	VERTICAL 4001453 cETLus VERIFIED CMR UTP 50PR 24 AWG CAT3 ANSI/TIA-568.2-D RoHS V1379PXXXXX XXXXFT

ELECTRICAL

Voltage rating:	30 VRMS
Impedance (1.0-250.0MHz):	100 ±15Ω
Max Conductor DC Resistance 20°:	105 Ω/km
D-C Resistance Unbalance:	≤5.0%

ENVIRONMENTAL

Temperature Rating:	75 °C
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VERTICAL CABLE

951.696.7772 California
 800.749.2447 Florida
 845.391.8318 New York
 713.322.7242 Texas



verticalcable.com

Rev. 9/2025

Subject to change without notice.

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MECHANICAL

Test Object	Jacket
Test Material	PVC
Before Aging:	
Tensile Strength (Mpa):	≥13.8
Elongation (%):	≥100
Aging Condition (° C × hrs):	100 x168
After Aging:	
Tensile Strength (Mpa):	≥85% of unaged
Elongation (%):	≥50% of unaged
Cold Bend (-20±2°C x 4hrs):	No Crack

PERFORMANCE

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

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