

2412 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cables



For more Information
please call

1-800-Belden1



Description:

23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Tape Separator, Ripcord, PVC Jacket.

Usage (Overall)

Suitable Applications:

Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG
ANYLAN, 155ATM, 622ATM

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	23	Solid	BC - Bare Copper

Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.220

Outer Jacket Ripcord:

Yes

Overall Cabling

Overall Cabling Separator Material:

Dielectric Tape

Pair

Pair Color Code Chart:

Number	Color
1	White/Blue Stripe and Blue
2	White/Orange Stripe and Orange
3	White/Green Stripe and Green
4	White/Brown Stripe and Brown

Mechanical Characteristics (Overall)

Storage Temperature Range: -20°C To +75°C

Installation Temperature Range: +5°C To +50°C

Operating Temperature Range: -20°C To +75°C

Bulk Cable Weight: 24 lbs/1000 ft.

2412 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cables

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius (Install)/Minor Axis: 1 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMR

Other Standards: ISO/IEC 11801 ed 2.1 (2008) Class E

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

Telecommunications Standards: Category 6 - TIA 568.C.2

Other Specification: Third party verified to Category 6

Applicable Patents:

Country	Patent
US	6570095
US	6998537
US	7179999

Flame Test

UL Flame Test: UL1666 Vertical Riser

C(UL) Flame Test: FT4

CSA Flame Test: FT4

Plenum/Non-Plenum

Plenum (Y/N): No

Plenum Number: 2413

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)

17.000

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%)

70

Maximum Delay:

Delay (ns/100 m)

537 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

8.2

2412 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cables

Max. Operating Voltage - UL:

Voltage
300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
5

Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
0.772	1.800	77.0	75.0	75.2	73.2	
1	2.000	75.3	73.3	73.3	71.3	20.000
4	3.700	66.3	64.3	62.6	60.6	23.000
8	5.200	63.3	61.3	58.1	56.1	24.500
10	5.800	61.8	59.8	56.0	54.0	25.000
16	7.400	58.6	56.6	51.2	49.2	25.000
20	8.300	57.1	55.1	48.8	46.8	25.000
25	9.300	55.5	53.5	46.3	44.3	24.300
31.25	10.400	54.0	52.0	43.6	41.6	23.600
62.5	15.000	49.1	47.1	34.1	32.1	21.500
100	19.300	45.8	43.8	26.5	24.5	20.800
155	24.500	42.7	40.7	18.2	16.2	19.500
200	28.300	40.9	38.9	12.6	10.6	18.700
250	32.100	39.3	37.3	7.2	5.2	18.000
300	35.600	38.1	36.1	2.5	-0.5	17.500
350	38.900	37.1	35.1	-1.7	-3.7	17.000
400	42.000	36.3	34.3	-5.7	-7.7	16.600
450	45.000	35.5	33.5	-9.5	-11.5	16.200
500	47.900	34.8	32.8	-13.0	-15.0	15.900
550	50.600	34.2	32.2	-16.4	-18.4	15.600

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
0.772		102 ± 15	73.0	70.0
1	100 ± 15	102 ± 15	70.8	67.8
4	100 ± 15	100 ± 15	58.8	55.8
8	100 ± 15	100 ± 15	52.7	49.7
10	100 ± 15	100 ± 15	50.8	47.8
16	100 ± 15	100 ± 15	46.7	43.7
20	100 ± 15	100 ± 15	44.8	41.8
25	100 ± 15	100 ± 15	42.8	39.8
31.25	100 ± 15	100 ± 15	40.9	37.9
62.5	100 ± 15	100 ± 15	34.9	31.9
100	100 ± 15	100 ± 15	30.8	27.8
155	100 ± 22	100 ± 15	27.0	24.0
200	100 ± 22	100 ± 15	24.8	21.8
250	100 ± 32	100 ± 15	22.8	19.8
300	100 ± 32	100 ± 15	21.3	18.3
350			19.9	16.9
400			18.8	15.8
450			17.7	14.7
500			16.8	13.8
550			16.0	13.0

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft./1m intervals. Third party verified to ANSI/TIA-568-C.2, Category 6. Values above 300 MHz are for Engineering Information Only.

Reference (Overall)

2412 Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cables**Previous Part Number:**

24566415, 25066515T, 24566745, 24566745T, 24566745T+HU, 24566736T, 24566715, 24566715T, 25066885, 25066885T, 25066815T, 24566945, 24566945T, 24566945T+HU, 24566931, 24566931T, 24566931T+HU, 24566936T, 24566915, 24566915T, 24566915T+HU, 24566015, 24566015T, 24566P15, 24566P15T, 24566185, 24566185T, 24566185T+HU, 24566115T, 24566345, 24566345T, 24566345T+HU, 24566336T, 24566315, 24566315T, 24566315T+HU, 24566485, 24566485T, 24566415T, 24566415T

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
2412 002A1000	1,000 FT	26.000 LB	RED	C	CAT6+ 4PR U/UTP CMR RIB
2412 003A1000	1,000 FT	26.000 FT	ORANGE		CAT6+ 4PR U/UTP CMR RIB
2412 004A1000	1,000 FT	26.000 FT	YELLOW		CAT6+ 4PR U/UTP CMR RIB
2412 0041000	1,000 FT	24.000 LB	YELLOW		CAT6+ 4PR U/UTP CMR REEL
2412 0042500	2,500 FT	60.000 LB	YELLOW		CAT6+ 4PR U/UTP CMR REEL
2412 005A1000	1,000 FT	26.000 FT	GREEN, DARK		CAT6+ 4PR U/UTP CMR RIB
2412 0051000	1,000 FT	24.000 LB	GREEN, DARK		CAT6+ 4PR U/UTP CMR REEL
2412 006A1000	1,000 FT	26.000 FT	BLUE, LIGHT		CAT6+ 4PR U/UTP CMR RIB
2412 006U1000	1,000 FT	23.000 LB	BLUE, LIGHT		CAT6+ 4PR U/UTP CMR BOX
2412 0061000	1,000 FT	24.000 LB	BLUE, LIGHT		CAT6+ 4PR U/UTP CMR REEL
2412 0061400	1,400 FT	0.000	BLUE, LIGHT		CAT6+ 4PR U/UTP CMR REEL
2412 0062500	2,500 FT	60.000 LB	BLUE, LIGHT		CAT6+ 4PR U/UTP CMR REEL
2412 007A1000	1,000 FT	26.000 FT	VIOLET		CAT6+ 4PR U/UTP CMR RIB
2412 008U1000	1,000 FT	24.000 LB	GRAY		CAT6+ 4PR U/UTP CMR BOX
2412 0081000	1,000 FT	24.000 LB	GRAY		CAT6+ 4PR U/UTP CMR REEL
2412 009A1000	1,000 FT	26.000 FT	WHITE		CAT6+ 4PR U/UTP CMR RIB
2412 009U1000	1,000 FT	24.000 LB	WHITE		CAT6+ 4PR U/UTP CMR BOX
2412 0091000	1,000 FT	24.000 LB	WHITE		CAT6+ 4PR U/UTP CMR REEL
2412 0092500	2,500 FT	60.000 LB	WHITE		CAT6+ 4PR U/UTP CMR REEL
2412 010A1000	1,000 FT	26.000 FT	BLACK		CAT6+ 4PR U/UTP CMR RIB
2412 0101000	1,000 FT	24.000 LB	BLACK		CAT6+ 4PR U/UTP CMR REEL

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 11-12-2010

© 2011 Belden, Inc.
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.