

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



For more Information
please call

1-800-Belden1



General Description:

CAT6+ (350MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 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 |

Total Number of Conductors: 8

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. (mm) |
|----------------|
| 5.588 |

Outer Jacket Ripcord: Yes

Overall Cable

Overall Cabling Separator Material: Patented Dielectric Tape

Overall Nominal Diameter: 5.588 mm

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

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

| | |
|-----------------------------------|---------------|
| Installation Temperature Range: | +5°C To +50°C |
| Operating Temperature Range: | 0°C To +75°C |
| Bulk Cable Weight: | 35.717 Kg/Km |
| Max. Recommended Pulling Tension: | 177.928 N |
| Min. Bend Radius/Minor Axis: | 19.050 mm |
| Min. Bend/Installation: | 57.150 mm |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|-------------------------------------|
| NEC/(UL) Specification: | CMR |
| CEC/C(UL) Specification: | CMR |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| 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 |
| US | 7977575 |

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/m) | 55.777 |
|--------------------|--------|

| | |
|---|-----|
| Maximum Capacitance Unbalance (pF/100 m): | 330 |
|---|-----|

Nominal Velocity of Propagation:

| | |
|--------|----|
| VP (%) | 70 |
|--------|----|

Maximum Delay:

| | |
|------------------|--|
| Delay (ns/100 m) | |
|------------------|--|

METRIC MEASUREMENT VERSION

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

537 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)
35.000

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
7.800

Max. Operating Voltage - UL:

Voltage
300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
3.000

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) |
|-------------|-----------------------------|----------------|------------------|---------------|-----------------|-------------|
| 1 | 2.000 | 75.3 | 75.3 | 73.3 | 73.3 | 20.000 |
| 4 | 3.700 | 66.3 | 66.3 | 62.6 | 62.6 | 23.000 |
| 8 | 5.200 | 61.8 | 61.8 | 56.6 | 56.6 | 24.500 |
| 10 | 5.800 | 60.3 | 60.3 | 54.5 | 54.5 | 25.000 |
| 16 | 7.400 | 57.2 | 57.2 | 49.9 | 49.9 | 25.000 |
| 20 | 8.300 | 55.8 | 55.8 | 47.5 | 47.5 | 25.000 |
| 25 | 9.300 | 54.3 | 54.3 | 45.1 | 45.1 | 24.300 |
| 31.25 | 10.400 | 52.9 | 52.9 | 42.5 | 42.5 | 23.600 |
| 62.5 | 15.000 | 48.4 | 48.4 | 33.4 | 33.4 | 21.500 |
| 100 | 19.300 | 45.3 | 45.3 | 26.0 | 26.0 | 20.800 |
| 155 | 24.600 | 42.4 | 42.4 | 17.9 | 17.9 | 19.500 |
| 200 | 28.300 | 40.8 | 40.8 | 12.5 | 12.5 | 18.700 |
| 250 | 32.100 | 39.3 | 39.3 | 7.2 | 7.2 | 18.000 |
| 300 | 35.600 | 38.1 | 36.1 | 0.5 | 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. ACRF (dB) | Min. PSACRF (dB) |
|-------------|------------------------------|------------------|----------------|------------------|
| 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 | 100 ± 32 | 100 ± 15 | 19.9 | 16.9 |
| 400 | 100 ± 32 | 100 ± 15 | 18.8 | 15.8 |
| 450 | 100 ± 32 | 100 ± 15 | 17.7 | 14.7 |
| 500 | 100 ± 32 | 100 ± 15 | 16.8 | 13.8 |
| 550 | 100 ± 32 | 100 ± 15 | 16.0 | 13.0 |

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

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft./1m intervals. Third party verified to ANSI/TIA-568-C.2, Category 6. Values above 350 MHz are for Engineering Information Only. In addition to the colors below, Pink is also available as a special, p/n 2412 012 U1000, or 2412 012 A1000.

Reference (Overall)

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 | 305 MT | 12.247 KG | RED | C | CAT6+ 4PR U/UTP CMR RIB |
| 2412 003A1000 | 305 MT | 12.247 KG | ORANGE | | CAT6+ 4PR U/UTP CMR RIB |
| 2412 003U1000 | 305 MT | 10.886 KG | ORANGE | | CAT6+ 4PR U/UTP CMR BOX |
| 2412 004A1000 | 305 MT | 12.247 KG | YELLOW | | CAT6+ 4PR U/UTP CMR RIB |
| 2412 004U1000 | 305 MT | 10.886 KG | YELLOW | | CAT6+ 4PR U/UTP CMR BOX |
| 2412 0041000 | 305 MT | 11.340 KG | YELLOW | | CAT6+ 4PR U/UTP CMR REEL |
| 2412 0042500 | 762 MT | 28.350 KG | YELLOW | | CAT6+ 4PR U/UTP CMR REEL |
| 2412 005A1000 | 305 MT | 12.247 KG | GREEN, DARK | | CAT6+ 4PR U/UTP CMR RIB |
| 2412 005U1000 | 305 MT | 10.886 KG | GREEN, DARK | | CAT6+ 4PR U/UTP CMR BOX |
| 2412 0051000 | 305 MT | 11.340 KG | GREEN, DARK | | CAT6+ 4PR U/UTP CMR REEL |
| 2412 006A1000 | 305 MT | 12.247 KG | BLUE, LIGHT | | CAT6+ 4PR U/UTP CMR RIB |
| 2412 006U1000 | 305 MT | 10.886 KG | BLUE, LIGHT | | CAT6+ 4PR U/UTP CMR BOX |
| 2412 0061000 | 305 MT | 11.340 KG | BLUE, LIGHT | | CAT6+ 4PR U/UTP CMR REEL |
| 2412 0061400 | 427 MT | 15.876 KG | BLUE, LIGHT | | CAT6+ 4PR U/UTP CMR REEL |
| 2412 0062500 | 762 MT | 28.350 KG | BLUE, LIGHT | | CAT6+ 4PR U/UTP CMR REEL |
| 2412 0065000 | 1,524 MT | 56.699 KG | BLUE, LIGHT | C | CAT6+ 4PR U/UTP CMR REEL |
| 2412 007A1000 | 305 MT | 12.247 KG | VIOLET | | CAT6+ 4PR U/UTP CMR RIB |
| 2412 007U1000 | 305 MT | 10.886 KG | VIOLET | | CAT6+ 4PR U/UTP CMR BOX |
| 2412 008A1000 | 305 MT | 12.247 KG | GRAY | | CAT6+ 4PR U/UTP CMR RIB |
| 2412 008U1000 | 305 MT | 10.886 KG | GRAY | | CAT6+ 4PR U/UTP CMR BOX |
| 2412 0081000 | 305 MT | 11.340 KG | GRAY | | CAT6+ 4PR U/UTP CMR REEL |
| 2412 009A1000 | 305 MT | 12.247 KG | WHITE | | CAT6+ 4PR U/UTP CMR RIB |
| 2412 009U1000 | 305 MT | 10.886 KG | WHITE | | CAT6+ 4PR U/UTP CMR BOX |
| 2412 0091000 | 305 MT | 11.340 KG | WHITE | | CAT6+ 4PR U/UTP CMR REEL |
| 2412 0092500 | 762 MT | 28.350 KG | WHITE | | CAT6+ 4PR U/UTP CMR REEL |
| 2412 0095000 | 1,524 MT | 56.699 KG | WHITE | C | CAT6+ 4PR U/UTP CMR REEL |
| 2412 010A1000 | 305 MT | 12.247 KG | BLACK | | CAT6+ 4PR U/UTP CMR RIB |
| 2412 010U1000 | 305 MT | 10.886 KG | BLACK | | CAT6+ 4PR U/UTP CMR BOX |
| 2412 0101000 | 305 MT | 11.340 KG | BLACK | | CAT6+ 4PR U/UTP CMR REEL |

Notes:
C = CRATE REEL PUT-UP.

Revision Number: 5 Revision Date: 01-07-2014

© 2014 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.

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

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.

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А