



**No longer
Available**
1-800-BELDEN1

For more Information
please call

1-800-Belden1



General Description:

CAT6 (250MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 24 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	24	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. (in.)
0.221

Outer Jacket Ripcord:

Yes

Overall Cable

Overall Cabling Fillers:

Center 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)

Bulk Cable Weight: 23 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius/Minor Axis: 1 in.

Min. Bend/Installation: 2.200 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

CEC/C(UL) Specification: CMR

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: Yes

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

7881A Multi-Conductor - Replaced by 2412

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
Other Specification:	Third party verified to Category 6

Flame Test

UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT4

Plenum/Non-Plenum

Plenum Number:	7882A
----------------	-------

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

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

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)	Min. SRL (dB)
1	2.000	74.3	72.3	72.3	70.3	20.000	na
4	3.800	65.3	63.3	61.5	59.5	23.000	na
8	5.300	60.8	58.8	55.4	53.4	24.500	na
10	6.000	59.3	57.3	53.3	51.3	25.000	na
16	7.600	56.2	54.3	48.7	46.7	25.000	na
20	8.500	54.8	52.8	46.3	44.3	25.000	na
25	9.500	53.3	51.3	43.8	41.8	24.300	na
31.25	10.700	51.9	49.9	41.2	39.2	23.600	na
62.5	15.400	47.4	45.4	32.0	30.0	21.500	na
100	19.800	44.3	42.3	24.5	22.5	20.100	na
155	25.200	41.5	39.5	16.3	14.3	18.800	na
200	29.000	39.8	37.8	10.8	8.8	18.000	na
250	32.800	38.3	36.3	5.5	3.5	17.300	na
300	36.400	37.1	35.1	0.7		16.800	na
350	39.800	36.1	34.1			16.300	na
400	43.000	35.3	33.3			15.900	na
500	48.900	33.8	31.8			15.200	na
550	51.800	33.2	31.2			14.900	na

Premise Cable Electrical Table 2:

Freq. (MHz) Input (Unfitted) Imp. (Ohms) Fitted Impedance Min. ELFEXT (dB) Min. PSELFEXT (dB)

7881A Multi-Conductor - Replaced by 2412

1	100 ± 15	100 ± 15	67.8	64.8
4	100 ± 15	100 ± 15	55.8	52.7
8	100 ± 15	100 ± 15	49.7	46.7
10	100 ± 15	100 ± 15	47.8	44.8
16	100 ± 15	100 ± 15	43.7	40.7
20	100 ± 15	100 ± 15	41.8	38.8
25	100 ± 15	100 ± 15	39.8	36.8
31.25	100 ± 15	100 ± 15	37.9	34.9
62.5	100 ± 15	100 ± 15	31.9	28.9
100	100 ± 15	100 ± 15	27.8	24.8
155	100 ± 20	100 ± 15	23.9	20.9
200	100 ± 20	100 ± 15	21.8	18.8
250	100 ± 20	100 ± 15	19.8	16.8
300	100 ± 25	100 ± 15	18.3	15.3
350	100 ± 25	100 ± 15	16.9	13.9
400	100 ± 25	100 ± 15	15.8	12.8
500	100 ± 25	100 ± 15	13.8	10.8
550	100 ± 25	100 ± 15		

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2-1, Category 6. US Patents 5424491, 6570095, 6998537.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
--------	-------	-------------	-------	-------	-----------

Revision Number: 0 Revision Date: 08-06-2013

© 2017 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 2014/35/EU).

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Belden Wire & Cable:

[7881A 0021000](#) [7881A 0031000](#) [7881A 0041000](#) [7881A 0051000](#) [7881A 0061000](#) [7881A 0071000](#) [7881A 0081000](#) [7881A 0091000](#) [7881A 0101000](#) [7881A 008U1000](#) [7881A 006U1000](#) [7881A 004U1000](#) [7881A 005U1000](#) [7881A 002U1000](#) [7881A 009U1000](#) [7881A 010A1000](#) [7881A 005A1000](#) [7881A 003A1000](#) [7881A 002A1000](#) [7881A 006A1000](#) [7881A 003U1000](#) [7881A 010U1000](#) [7881A 008A1000](#) [7881A 007A1000](#) [7881A 009A1000](#) [7881A 004A1000](#)