

## 7914S Composite - Composite Data, Audio, Video, Security and Control Cable



For more Information  
please call

1-800-Belden1



### Description:

Banana Peel® Composite - (2) Cat 5e 4-pair 24 AWG unshielded plus (2) Series 6 Coax w/Duobond® IV Quad shield plus (1) 2-Fiber LANLite®, polyolefin insulation on the pairs; Gas-injected FPE insulation on the coax, F-R PVC jackets, No overall jacket.

### Usage (Overall)

**Suitable Applications:** HDTV, DBS, CATV, CCTV, Multimedia, Voice, Data, High Sped Internet, Networked Computing, Distributed Video, Distributed Audio, Security Monitoring, Energy Monitoring

### Coax

#### Physical Characteristics

##### Conductor

###### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
2	18	Solid	BC - Bare Copper	1.016

##### Insulation

###### Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FPE - Foam Polyethylene	4.572

##### Outer Shield

###### Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
2		Braid	AL - Aluminum	60.000
3		Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
4		Braid	AL - Aluminum	40.000

##### Outer Jacket

###### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

###### Outer Jacket Diameter:

Nom. Dia. (mm)
0.757

###### Outer Jacket Color Code Chart:

Number	Color
1	Black
2	White

### Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs

**Series Type:** Series 6

### Electrical Characteristics

#### Nom. Characteristic Impedance:

Impedance (Ohm)
75

METRIC MEASUREMENT VERSION

## 7914S Composite - Composite Data, Audio, Video, Security and Control Cable

**Nom. Inductance:**

Inductance (μH/m)
0.318

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/m)
53.152

**Nominal Velocity of Propagation:**

VP (%)
83.000

**Nominal Delay:**

Delay (ns/m)
3.937

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/km)
20.998

**Nom. Inner Shield DC Resistance:**

DCR @ 20°C (Ohm/km)
15.749

**Minimum Structural Return Loss:**

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
5.000	1000.000	20.000
1000.000	2250.000	15.000
2250.000	3000.000	10.000

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
5.000	1.641
55.000	4.593
211.000	8.531
500.000	13.452
750.000	16.733
862.000	18.046
1000.000	19.686
1450.000	25.592
1800.000	28.217
2250.000	32.154
3000.000	37.075

**Max. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
5.000	2.198
55.000	5.250
211.000	9.416
500.000	14.699
750.000	18.341
862.000	19.620
1000.000	21.458
1450.000	26.248
1800.000	28.873
2250.000	32.810
3000.000	39.044

**Max. Operating Voltage - UL:**

350 V RMS

**Shield Effectiveness:**

Start Frequency (MHz)	Stop Frequency (MHz)	Shield Effectiveness (dB)
5.000	50.000	105.000
50.000	1000.000	110.000

## 7914S Composite - Composite Data, Audio, Video, Security and Control Cable

Other Electrical Characteristic 1: Coax Sweep tested to 3.0 GHz.

### Twisted Pair

#### Physical Characteristics

##### Conductor

###### AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
8	24	Solid	BC - Bare Copper	0.508

##### Insulation

###### Insulation Material:

Insulation Material	Dia. (mm)
PO - Polyolefin	0.889

###### Twisted 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

##### Outer Jacket

###### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

###### Outer Jacket Diameter:

Nom. Dia. (mm)
4.928

Outer Jacket Ripcord: Yes

###### Outer Jacket Color Code Chart:

Number	Color
1	Blue
2	Green

#### Electrical Characteristics

##### Nom. Mutual Capacitance:

Capacitance (pF/m)
49.215

##### Nominal Velocity of Propagation:

VP (%)
70.000

##### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
30.776

##### Max. Operating Voltage - UL:

Voltage
300 V RMS

Other Electrical Characteristic 1: Third party verified to TIA/EIA-568-B.2, Category 5e.

##### Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1.0	2.000	62.3	60	20.000
4.0	4.100	53.3	49	23.000
8.0	5.800	48.8	43	24.500
10.0	6.500	47.3	41	25.000
16.0	8.200	44.3	36	25.000
20.0	9.300	42.8	34	25.000
25.0	10.400	41.3	31	24.300
31.25	11.700	39.9	28	23.600

## 7914S Composite - Composite Data, Audio, Video, Security and Control Cable

62.5	17.000	35.4	19	21.500
100	22.000	32.3	11	20.100

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Min. PSELFEXT (dB)
1.0	100 ± 15%	60.8
4.0	100 ± 15%	48.7
8.0	100 ± 15%	42.7
10.0	100 ± 15%	40.8
16.0	100 ± 15%	36.7
20.0	100 ± 15%	34.7
25.0	100 ± 15%	32.8
31.25	100 ± 15%	30.9
62.5	100 ± 15%	24.8
100	100 ± 15%	20.8

### Fiber

#### Physical Characteristics

Fiber Type: 62.5/125/900 Micron

Number of Fibers: 2

#### Fiber Color Code Chart:

Number	Color
1	Blue
2	Orange

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material  
PVC - Polyvinyl Chloride

##### Outer Jacket Diameter:

Nom. Dia. (mm)  
4.445

Outer Jacket Color: Orange

### Physical Characteristics (Overall)

#### Conductor

#### Outer Shield

##### Outer Shield Material:

Outer Shield Material  
Unshielded

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material  
Unjacketed

#### Overall Cabling

Overall Nominal Diameter: 15.875 mm

### Mechanical Characteristics (Overall)

Bulk Cable Weight: 205.372 Kg/Km

Max. Recommended Pulling Tension: 1236.600 N

Min. Bend Radius (Install)/Minor Axis: 107.950 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR, OF

## METRIC MEASUREMENT VERSION

### 7914S Composite - Composite Data, Audio, Video, Security and Control Cable

<b>CEC/C(UL) Specification:</b>	CMG, OF
<b>Other Standards:</b>	ISO/IEC 11801, Category 5
<b>EU CE Mark:</b>	Yes
<b>EU Directive 2000/53/EC (ELV):</b>	Yes
<b>EU Directive 2002/95/EC (RoHS):</b>	Yes
<b>EU RoHS Compliance Date (mm/dd/yyyy):</b>	07/01/2005
<b>EU Directive 2002/96/EC (WEEE):</b>	Yes
<b>EU Directive 2003/11/EC (BFR):</b>	Yes
<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>MII Order #39 (China RoHS):</b>	Yes
<b>Telecommunications Standards:</b>	ANSI/TIA/EIA-568-B.2, Category 5e
<b>Other Specification:</b>	NEMA WC-63.1, Category 5e

#### Flame Test

<b>UL Flame Test:</b>	UL1666 Riser
<b>C(UL) Flame Test:</b>	FT4

#### Plenum/Non-Plenum

<b>Plenum (Y/N):</b>	No
----------------------	----

#### Notes (Overall)

**Notes:** Shielding effectiveness determined from screening attenuation measurement when tested in accordance with IEC 61196-1. Banana Peel® US PATENT 7049523.

#### Related Documents:

No related documents are available for this product

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7914S 000X	305 MT	48.988 KG	NONE	C	2 RG6 QUAD + 2 CAT 5E + 2MMF
7914S 0001000	305 MT	67.132 KG	NONE	C	2 RG6 QUAD + 2 CAT 5E + 2MMF
7914S 000500	152 MT	34.927 KG	NONE	C	2 RG6 QUAD + 2 CAT 5E + 2MMF

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 0    Revision Date: 02-08-2008

© 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.