

7810A Coax - RG-8 Type

For more Information
please call

1-800-Belden1

**Description:**

RG-8 type, 10 AWG solid .108" bare copper-covered aluminum conductor, gas-injected foam HDPE insulation, Duobond® II + tinned copper braid shield (95% coverage), polyethylene jacket.

Physical Characteristics (Overall)**Conductor****AWG:**

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	10	Solid	BCCA - Bare Copper Covered Aluminum	2.7432

Insulation**Insulation Material:**

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	7.239

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
2		Braid	TC - Tinned Copper	95

Outer Jacket**Outer Jacket Material:**

Outer Jacket Material
PE - Polyethylene

Overall Cabling

Overall Nominal Diameter: 10.236 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	114.591 Kg/Km
Max. Recommended Pulling Tension:	667.230 N
Min. Bend Radius (Install)/Minor Axis:	101.600 mm

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

EU CE Mark:	No
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

7810A Coax - RG-8 Type

MII Order #39 (China RoHS):	Yes
-----------------------------	-----

RG Type:	8/U
----------	-----

Series Type:	RF 400
--------------	--------

Suitability

Suitability - Outdoor:	Yes
------------------------	-----

Suitability - Aerial:	Yes - When supported by a messenger
-----------------------	-------------------------------------

Suitability - Burial:	Yes
-----------------------	-----

Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

Electrical Characteristics (Overall)**Nom. Characteristic Impedance:**

Impedance (Ohm)

50

Nom. Inductance:

Inductance (µH/m)

0.19686

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

75.463

Nominal Velocity of Propagation:

VP (%)

86

Nominal Delay:

Delay (ns/m)

3.83877

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

4.39654

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

6.562

Maximum VSWR:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
		5	6000	1.25:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
30	2.2967
50	2.9529
150	4.9215
220	5.9058
450	8.8587
900	12.4678
1500	16.7331
1800	18.3736
2000	19.686
2500	21.9827
3000	24.6075
3500	26.9042
4500	31.1695
5800	36.4191
6000	37.4034

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
30	2.2967
50	3.05133
150	5.18398
220	6.36514
450	9.28523
900	13.3209
1500	17.4549
1800	19.6204
2000	20.8344
2500	23.2295
3000	26.1496
3500	28.8728
4500	33.5646
5800	39.372
6000	40.1266

Max. Power Rating:

Freq. (MHz)	Rating (W)
30	3427
50	2588
150	1428
220	1195
450	817
900	575
1500	437
1800	399
2000	375
2500	334
3000	305
3500	282
4500	247
5800	217
6000	213

Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

Sweep Test**Sweep Testing:**

100% Sweep tested to 6 GHz.

Misc. Information (Overall)**Notes (Overall)**

Notes: Belden® The Wire in Wireless®

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7810A 0101000	305 MT	35.834 KG	BLACK	C	RF400 WIRELESS 50 OHM COAX PE
7810A 010500	152 MT	17.690 KG	BLACK	C	RF400 WIRELESS 50 OHM COAX PE

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 09-30-2009

© 2010 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.