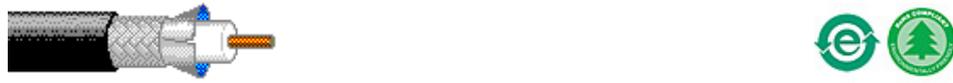


## 7810A Coax - RG-8 Type

	<p>For more information please call <b>1-800-Belden1</b></p> <p><u>See Put-ups and Colors</u></p>
--	---

### 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:

#### CONDUCTOR:

Number of Coax	1
Total Number of Conductors	1
RG Type	8/U
Series Type	RF 400
AWG	10
Stranding	Solid
Conductor Diameter	.108 in.
Conductor Material	BCCA - Bare Copper Covered Aluminum

#### INSULATION:

Insulation Material	Gas-injected FHDPE - Foam High Density Polyethylene
Insulation Diameter	.285 in.

#### OUTER SHIELD:

Outer Shield Material Trade Name	Duobond® II
Outer Shield Type	Tape/Braid

Outer Shield Material :

Layer Number	Trade Name	Type	Material	% Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

Outer Shield % Coverage	100 %
-------------------------	-------

#### OUTER JACKET:

Outer Jacket Material	PE - Polyethylene
-----------------------	-------------------

#### OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.403 in.
--------------------------	----------

#### MECHANICAL CHARACTERISTICS:

## 7810A Coax - RG-8 Type

Operating Temperature Range	-40°C To +75°C
Non-UL Temperature Rating	80°C
Bulk Cable Weight	77 lbs/1000 ft.
Max. Recommended Pulling Tension	150 lbs.
Min. Bend Radius (Install)	4 in.

### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

EU CE Mark (Y/N)	No
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004

#### SWEEP TEST:

Sweep Testing	100% Sweep tested to 6 GHz.
---------------	-----------------------------

#### SUITABILITY:

Suitability - Outdoor	Yes
Suitability - Aerial	Yes - When supported by a messenger
Suitability - Burial	Yes
Suggested Connectors	Mates with 9913 and Land Mobile Radio type connectors.

#### PLENUM/NON-PLENUM:

Plenum (Y/N)	N
--------------	---

#### ELECTRICAL CHARACTERISTICS:

Nom. Characteristic Impedance	50 Ohms
Nom. Inductance	0.060 µH/ft
Nom. Capacitance Conductor to Shield	23.0 pF/ft
Nominal Velocity of Propagation	86 %
Nominal Delay	1.17 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	1.34 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20 Deg.C	2 Ohms/1000 ft

#### Maximum VSWR :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Maximum VSWR
		5	6000	1.25:1

Nom. Attenuation :

**7810A Coax - RG-8 Type**

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	30			0.7
	50			0.9
	150			1.5
	220			1.8
	450			2.7
	900			3.8
	1500			5.1
	1800			5.6
	2000			6.0
	2500			6.7
	3000			7.5
	3500			8.2
	4500			9.5
	5800			11.1
	6000			11.4

Max. Attenuation :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Attenuation (dB/100 ft.)
	30			0.70
	50			0.93
	150			1.58
	220			1.94
	450			2.83
	900			4.06
	1500			5.32
	1800			5.98
	2000			6.35
	2500			7.08
	3000			7.97
	3500			8.80
	4500			10.23
	5800			12.00
	6000			12.23

Max. Power Rating :

**7810A Coax - RG-8 Type**

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Power 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 300 V RMS

**NOTES:**

Notes Belden® The Wire in Wireless®

**PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
7810A 0101000	RF400 WIRELESS 50 OHM COAX PE	1000	86	BLACK	C
7810A 010500	RF400 WIRELESS 50 OHM COAX PE	500	42.5	BLACK	C

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 07-08-2005

---

## 7810A Coax - RG-8 Type

---

© Copyright 2006 Belden, Inc  
All Rights Reserved.

Although Belden ("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 the following environmental regulations: California Proposition 65 Consent Judgment For Wire & Cable Mfgs. (San Francisco Superior Court Nos. 312962 And 320342); EU RoHS (Directive 2002/95/EC, 27-Jan-2003); Material manufactured prior to the compliance date may still be in stock at Belden facilities and in our Distributor's inventory. EU ELV (Directive 2000/53/EC, 18-Sept-2000); EU WEEE (Directive 2002/96/EC, 27-Jan-2003); And EU BFR (Directive 2003/11/EC, 6-Feb-2003). 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 the 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.