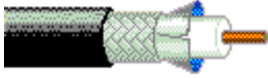


**Part Number: 7810A**

**RF 400 Wireless Coax, RG8, 10 AWG**



## Product 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.

## Technical Specifications

### Product Overview

Environmental Space:	Indoor (Not Riser or Plenum)
----------------------	------------------------------

### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
10	Solid	BCCA - Bare Copper Covered Aluminum	0.108 in	1
Conductor Count:		1		
Conductor Size:		10 AWG		

#### Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.285 in

#### Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Bonded Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

#### Outer Jacket Material

Material	Nominal Diameter
PE - Polyethylene	0.403 in

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
1.34 Ohm/1000ft	2 Ohm/1000ft	2 Ohm/1000ft

#### Capacitance

Nom. Capacitance Conductor to Shield	
23 pF/ft	
Shielding:	Multiple or Specialty

#### Inductance

Nominal Inductance
0.06 µH/ft

#### Impedance

Nominal Characteristic Impedance
50 Ohm

**High Frequency (Nominal/Typical)**

Frequency [MHz]	Nom. Insertion Loss
30 MHz	0.7 dB/100ft
50 MHz	0.9 dB/100ft
150 MHz	1.5 dB/100ft
220 MHz	1.8 dB/100ft
450 MHz	2.7 dB/100ft
900 MHz	3.8 dB/100ft
1500 MHz	5.1 dB/100ft
1800 MHz	5.6 dB/100ft
2000 MHz	6 dB/100ft
2500 MHz	6.7 dB/100ft
3000 MHz	7.5 dB/100ft
3500 MHz	8.2 dB/100ft
4500 MHz	9.5 dB/100ft
5800 MHz	11.1 dB/100ft
6000 MHz	11.4 dB/100ft

**Delay**

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.17 ns/ft	86 %

**High Freq**

Frequency [MHz]	Max. Insertion Loss (Attenuation)
30 MHz	0.7 dB/100ft
50 MHz	0.93 dB/100ft
150 MHz	1.58 dB/100ft
220 MHz	1.94 dB/100ft
450 MHz	2.83 dB/100ft
900 MHz	4.06 dB/100ft
1500 MHz	5.32 dB/100ft
1800 MHz	5.98 dB/100ft
2000 MHz	6.35 dB/100ft
2500 MHz	7.08 dB/100ft
3000 MHz	7.97 dB/100ft
3500 MHz	8.8 dB/100ft
4500 MHz	10.23 dB/100ft
5800 MHz	12 dB/100ft
6000 MHz	12.23 dB/100ft

**Power Rating**

Frequency [MHz]	Max. Power Rating [W]
30 MHz	3,427 W
50 MHz	2,588 W
150 MHz	1,428 W
220 MHz	1,195 W
450 MHz	817 W
900 MHz	575 W
1,500 MHz	437 W
2,000 MHz	375 W
2,500 MHz	334 W
3,500 MHz	282 W
4,500 MHz	247 W
6,000 MHz	213 W
4,500 MHz	247 W
5,800 MHz	217 W
6,000 MHz	213 W

**Voltage**

Non-UL Voltage Rating
300 V RMS

## VSWR

Frequency [MHz]	Max. VSWR
5 MHz - 6000 MHz	1.25:1

## Temperature Range

Non-UL Temp Rating:	80°C
Operating Temp Range:	-40°C To +75°C

## Mechanical Characteristics

Bulk Cable Weight:	70 lbs/1000ft
Max Recommended Pulling Tension:	150 lbs
Min Bend Radius/Minor Axis:	4 in

## Standards

RG Type:	8/U Type
Series Type:	RF 400
RG / Series Type:	RF 400

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

## Suitability

Suitability - Indoor:	Yes
-----------------------	-----

## Plenum/Non-Plenum

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

## Part Number

### Variants

Item #	Color	Footnote
7810A 0101000	Black	C
7810A 010500	Black	C

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

© 2018 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.