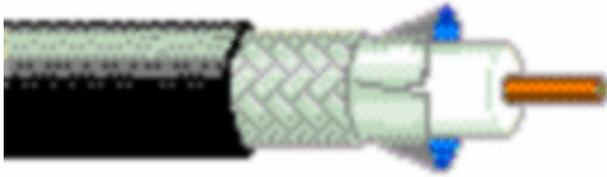


Part Number: 7810WB

RF 400 Wireless Coax, RG8, #10, Waterblocked



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), flooded water-resistant polyethylene jacket.

Technical Specifications

Product Overview

Environmental Space:	Outdoor
----------------------	---------

Physical Characteristics (Overall)

Conductor

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

Total Number of Conductors:	1
-----------------------------	---

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	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	Bonded Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

Outer Jacket Material

Material	Nominal Diameter
PE - Polyethylene	0.403 in

Electrical Characteristics

Capacitance

Nom. Capacitance Conductor to Shield
23 pF/ft

Shielding:	Foil + Braid(s)
------------	-----------------

Construction and Dimensions

Conductor DCR

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

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 %

Inductance

Nominal Inductance
0.06 μ H/ft

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
5-6000 MHz	1.25:1

Applicable Standards & Environmental Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/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

Standards

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

Suitability

Suitability - Aerial:	Yes - When supported by a messenger wire
Suitability - Burial:	Yes
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Mechanical Characteristics

Operating Temp Range:	-40°C To +75°C
Bulk Cable Weight:	73(lbs/1000ft)
Max Recommended Pulling Tension:	150(lbs)
Min Bend Radius/Minor Axis:	4(in)

Temperature Range

Non-UL Temp Rating:	80°C
---------------------	------

Plenum/Non-Plenum

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

Part Number

Suggested Connectors:	Mates with 9913 and Land Mobile Radio type connectors.
-----------------------	--

© 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 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 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.

Mouser Electronics

Authorized Distributor

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

[Belden Wire & Cable:](#)

[7810WB 0101000](#) [7810WB 010500](#)