# **Detailed Specifications & Technical Data**





## 7810WB Coax - RG-8 Type



For more Information please call

1-800-Belden1



### **General 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.

Dhusical Characteristics (Quarall)	
Physical Characteristics (Overall) Conductor	
AWG:	
# Coax AWG Stranding Conductor Material	Dia. (mm)
1 10 Solid BCCA - Bare Copper Covered Aluminur	n 2.7432
Total Number of Conductors:	1
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 (%)
	Polyester Tape-Aluminum Foil 100
2 Braid TC - Tinned Copper	95
Outer Shield Flooding Grease:	PO - Polyolefin
Outer Jacket	
Outer Jacket Material Outer Jacket Material	
PE - Polyethylene	
Overall Cable	
Overall Nominal Diameter:	10.236 mm
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-40°C To +75°C
Non-UL Temperature Rating:	0°08
Bulk Cable Weight:	108.639 Kg/Km
Max. Recommended Pulling Tension:	667.230 N
Min. Bend Radius/Minor Axis:	101.600 mm
Applicable Specifications and Agency Compliance (	Overall)
Applicable Standards & Environmental Programs	
EU Directive 2011/65/EU (ROHS II):	Yes
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
MII Order #39 (China RoHS):	Yes
RG Type:	8/U
Series Type:	RF 400

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## METRIC MEASUREMENT VERSION



# 7810WB Coax - RG-8 Type

uitability Suitability		
	/ - Outdoor:	
Suitability		
Suitability - Aerial:		
Suitability - Burial:		
lenum/Non-		
Plenum (Y	Y/N):	
ectrical Cl	haracteristics (Ov	
	eristic Impedance:	
Impedance	(Ohm)	
50		
om. Inductane		
0.19686	(µm/m)	
	Ince Conductor to Shiel	
Capacitance		
75.463		
ominal Veloci	ity of Propagation:	
VP (%)		
86		
ominal Delay:	:	
Delay (ns/m	ו)	
3.83877		
	or DC Resistance:	
	C (Ohm/km)	
4.39654		
	Shield DC Resistance:	
DCR @ 20°0	C (Ohm/km)	
6.562		
aximum VSW		
Description	Freq. (MHz) Start Free 5	
om. Attenuati		
om. Attenuati		
	ion:	
Freq. (MHz)	ion: Attenuation (dB/100m)	
<b>Freq. (MHz)</b> 30	ion: Attenuation (dB/100m) 2.2967	
Freq. (MHz)	ion: Attenuation (dB/100m)	
Freq. (MHz) 30 50	ion: Attenuation (dB/100m) 2.2967 2.9529	
Freq. (MHz) 30 50 150	ion: Attenuation (dB/100m) 2.2967 2.9529 4.9215	
Freq. (MHz) 30 50 150 220 450 900	ion: Attenuation (dB/100m) 2.2967 2.9529 4.9215 5.9058 8.8587 12.4678	
Freq. (MHz) 30 50 150 220 450 900 1500	ion: Attenuation (dB/100m) 2.2967 2.9529 4.9215 5.9058 8.8587 12.4678 16.7331	
Freq. (MHz)   30   50   150   220   450   900   1500   1800	ion: Attenuation (dB/100m) 2.2967 2.9529 4.9215 5.9058 8.8587 12.4678 16.7331 18.3736	
Freq. (MHz)   30   50   150   220   450   900   1500   1800   2000	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686	
Freq. (MHz)   30   50   150   220   450   900   1500   1800   2000   2500	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686   21.9827	
Freq. (MHz)   30   50   150   220   450   900   1500   1800   2000   2500   3000	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686	
Freq. (MHz)   30   50   150   220   450   900   1500   1800   2000   2500	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686   21.9827   24.6075	
Freq. (MHz) 30 50 150 220 450 900 1500 1800 2000 2500 3000 3500	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686   21.9827   24.6075   26.9042	
Freq. (MHz)   30   50   150   220   450   900   1500   2500   3000   3500   4500	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686   21.9827   24.6075   26.9042   31.1695	
Freq. (MHz) 30 50 150 220 450 900 1500 1800 2500 2500 3000 3500 4500	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686   21.9827   24.6075   26.9042   31.1695   36.4191   37.4034	
Freq. (MHz)   30   50   150   220   450   900   1500   2500   3000   3500   4500   5800   6000	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   21.9827   24.6075   26.9042   31.1695   36.4191   37.4034	
Freq. (MHz)   30   50   150   220   450   900   1500   2500   3000   3500   4500   5800   6000   ax. Power Ra   Freq. (MHz)   30	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   21.9827   24.6075   26.9042   31.1695   36.4191   37.4034	
Freq. (MHz)   30   50   150   220   450   900   1500   2500   3000   3500   4500   5800   6000   ax. Power Ra   Freq. (MHz)   30   50	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686   21.9827   24.6075   26.9042   31.1695   36.4191   37.4034   ating:   Rating (W)   3427   2588	
Freq. (MHz)   30   50   150   220   450   900   1500   2500   3000   3500   4500   5800   6000   ax. Power Ra   Freq. (MHz)   30   50   150	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686   21.9827   24.6075   26.9042   31.1695   36.4191   37.4034   ating:   Rating (W)   3427   2588   1428	
Freq. (MHz)   30   50   150   220   450   900   1500   2500   3000   3500   4500   5800   6000   ax. Power Ra   Freq. (MHz)   30   50   150   220	Attenuation (dB/100m)   2.2967   2.9529   4.9215   5.9058   8.8587   12.4678   16.7331   18.3736   19.686   21.9827   24.6075   26.9042   31.1695   36.4191   37.4034   ating:   Rating (W)   3427   2588   1428   1195	
Freq. (MHz)   30   50   150   220   450   900   1500   2500   3000   3500   4500   5800   6000   ax. Power Ra   Freq. (MHz)   30   50   150   220   450	ion: Attenuation (dB/100m) 2.2967 2.9529 4.9215 5.9058 8.8587 12.4678 16.7331 18.3736 19.686 21.9827 24.6075 26.9042 31.1695 36.4191 37.4034 atting: Rating (W) 3427 2588 1428 1195 817	
Freq. (MHz)   30   50   150   220   450   900   1500   2500   3000   3500   4500   5800   6000   ax. Power Ra   Freq. (MHz)   30   50   150   220   450   900	ion: Attenuation (dB/100m) 2.2967 2.9529 4.9215 5.9058 8.8587 12.4678 16.7331 18.3736 19.686 21.9827 24.6075 26.9042 31.1695 36.4191 37.4034 atting: Rating (W) 3427 2588 1428 1195 817 575	
Freq. (MHz)   30   50   150   220   450   900   1500   1800   2000   2500   3000   3500   4500   5800   6000   x. Power Ra   Freq. (MHz)   30   50   150   220   450	ion: Attenuation (dB/100m) 2.2967 2.9529 4.9215 5.9058 8.8587 12.4678 16.7331 18.3736 19.686 21.9827 24.6075 26.9042 31.1695 36.4191 37.4034 atting: Rating (W) 3427 2588 1428 1195 817	

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#### METRIC MEASUREMENT VERSION



### 7810WB Coax - RG-8 Type

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: 100% Sweep tested. 6 GHz. Belden® The Wire in Wireless®

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7810WB 0101000	1,000 FT	82.000 LB	BLACK	С	RF400 WIRELESS 50 OHM COAX WB
7810WB 010500	500 FT	40.500 LB	BLACK	С	RF400 WIRELESS 50 OHM COAX WB

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 10-17-2012

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