# **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.

Physical Characteristics (Overall)				
Conductor AWG:				
	Dia. (in.)			
1 10 Solid BCCA - Bare Copper Covered Aluminum .	108			
Total Number of Conductors:	1			
Insulation				
Insulation Material: Insulation Material Dia. (in.)				
Gas-injected FHDPE - Foam High Density Polyethylene .285				
Outer Shield Outer Shield Material:				
Layer # Outer Shield Trade Name Type Outer Shield Material		Coverage (%)		
1 Bonded Duofoil® Tape Bonded Aluminum Foil-Pol	lyester Tape-Aluminum Foil			
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:	0.403 in.			
Mechanical Characteristics (Overall)				
Operating Temperature Range:	-40°C To +75°C			
Non-UL Temperature Rating:	80°C			
Bulk Cable Weight:	73 lbs/1000 ft.			
Max. Recommended Pulling Tension:	150 lbs.			
Min. Bend Radius/Minor Axis:	4 in.			
Applicable Specifications and Agency Compliance (Ov	verall)			
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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## ENGLISH MEASUREMENT VERSION



# 7810WB Coax - RG-8 Type

Suitability			
Suitabi	ility - Outdoor:		Yes
Suitabi	ility - Aerial:		Yes - When supported by a messenger
	ility - Burial:		Yes
	on-Plenum		
Plenun	n (Y/N):		No
Floctrical	Characteristics (Over	all)	
	cteristic Impedance:	ally	
	ice (Ohm)		
50			
Nom. Induct	tance:		
	nce (µH/ft)		
0.060			
Nom. Capac	citance Conductor to Shield:		
	ance (pF/ft)		
23.0			
Nominal Ve	locity of Propagation:		
<b>VP (%)</b>			
86			
Nominal De	lay:		
Delay (n			
1.17			
Nom. Condu	uctor DC Resistance:		
DCR @ 2	20°C (Ohm/1000 ft)		
1.34			
Nominal Ou	ter Shield DC Resistance:		
DCR @ 2	20°C (Ohm/1000 ft)		
2			
2 Maximum V	SWR:		
Maximum V	ion Freq. (MHz) Start Freq. (	MHz) Stop Freq. (MHz) Max. V	SWR
Maximum V		MHz) Stop Freq. (MHz) Max. V 6000 1.25:1	/SWR
Maximum V	ion Freq. (MHz) Start Freq. (		'SWR
Maximum V Descript Nom. Attent	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.)		'SWR
Maximum V Descript Nom. Attenu Freq. (MI 30	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7		SWR
Maximum V Descript Nom. Attent Freq. (MI 30 50	ion         Freq. (MHz)         Start Freq. (           5         5           uation:         4           Attenuation (dB/100 ft.)         0.7           0.9         5		SWR
Maximum V Descript Nom. Attent 30 50 150	ion         Freq. (MHz)         Start Freq. (           5         5           uation:         4           0.7         0.9           1.5         5		SWR
Maximum V Descript Nom. Attenu 30 50 150 220	ion         Freq. (MHz)         Start Freq. (           5         5           uation:         4           0.7         0.9           1.5         1.8		'SWR
Maximum V Descript Nom. Attenu 30 50 150 220 450	ion         Freq. (MHz)         Start Freq. (           5         5           uation:         4           0.7         0.9           1.5         1.8           2.7         2.7		'SWR
Maximum V Descript Nom. Attenu 30 50 150 220	ion         Freq. (MHz)         Start Freq. (           5         5           uation:         4           0.7         0.9           1.5         1.8		SWR
Maximum V Descript Nom. Attenu 30 50 150 220 450 900	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7 0.9 1.5 1.8 2.7 3.8		SWR
Maximum V Descript Nom. Attenu 30 50 150 220 450 900 1500	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7 0.9 1.5 1.8 2.7 3.8 5.1		SWR
Maximum V Descript Nom. Attenu 50 150 220 450 900 1500 1500 1800 2000 2500	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7 0.9 1.5 1.8 2.7 3.8 5.1 5.6 6.0 6.0 6.7		SWR
Maximum V Descript Nom. Attenu 50 150 220 450 900 1500 1500 1500 1800 2000 2500 3000	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7 0.9 1.5 1.8 2.7 3.8 5.1 5.6 6.0 6.7 7.5		SWR
Maximum V Descript Nom. Attenu 50 150 220 450 900 1500 1500 1500 1800 2000 2500 3000 3500	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7 0.9 1.5 1.8 2.7 3.8 5.1 5.6 6.0 6.7 7.5 8.2		SWR
Maximum V Descript Nom. Attent Freq. (MI 30 50 150 220 450 900 1500 1500 1500 2500 3000 3500 4500	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7 0.9 1.5 1.8 2.7 3.8 5.1 5.6 6.0 6.7 7.5 8.2 9.5		SWR
Maximum V Descript Nom. Attent Freq. (MI 30 50 150 220 450 900 1500 1500 1500 2500 3000 3500 4500 5800	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7 0.9 1.5 1.8 2.7 3.8 5.1 5.6 6.0 6.7 7.5 6.2 9.5 11.1		
Maximum V           Descript           Nom. Attent           30           50           150           220           450           900           1500           2200           450           900           1500           3000           3500           4500           5800           6000	ion         Freq. (MHz)         Start Freq. (           0         5           uation:         4           0.7         0.9           1.5            1.8            2.7            3.8            5.1            5.6            6.7            7.5            9.5            11.1            11.4		
Maximum V Descript Nom. Attenu 30 50 150 220 450 900 1500 1500 1500 1800 2500 3000 2500 3000 3500 4500 5800 6000 Max. Power	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7 0.9 1.5 1.8 2.7 3.8 5.1 5.6 6.0 6.7 7.5 8.2 9.5 11.1 11.4 I1.4 Rating:		
Maximum V           Descript           Nom. Attent           30           50           150           220           450           900           1500           2200           450           900           1500           3000           3500           4500           5800           6000           Max. Power           Freq. (MI)	ion Freq. (MHz) Start Freq. ( 5 uation: Hz) Attenuation (dB/100 ft.) 0.7 0.9 1.5 1.8 2.7 3.8 5.1 5.6 6.0 6.7 7.5 8.2 9.5 11.1 11.4 11.4 Kating: Hz) Rating (W)		SWR
Maximum V           Descript           Nom. Attent           30           50           150           220           450           900           1500           2000           2500           3000           3500           4500           5800           6000           Max. Power           Freq. (MI           30	ion         Freq. (MHz)         Start Freq. (           0         5           uation:         4           Hz)         Attenuation (dB/100 ft.)           0.7         0.9           1.5         1.8           2.7         3.8           5.1         5.6           6.0         6.7           7.5         8.2           9.5         11.1           11.4         11.4           Rating (W)           3427		SWR
Maximum V Descript Nom. Attent Freq. (MI 30 50 150 220 450 900 1500 1500 1500 2500 3000 3500 4500 5800 6000 Max. Power Freq. (MI 30 50	ion         Freq. (MHz)         Start Freq. (           0         5           uation:         4           Hz)         Attenuation (dB/100 ft.)           0.7         0.9           1.5         1.8           2.7         3.8           5.1         5.6           6.0         6.7           7.5         8.2           9.5         11.1           11.4         11.4           Rating (W)           3427         2588		SWR
Maximum V Descript Descript Nom. Attent 30 50 150 220 450 900 1500 1500 1500 2500 3000 2500 3000 3500 4500 5800 6000 Max. Power Freq. (MI 30	ion         Freq. (MHz)         Start Freq. (           0         5           uation:         4           Hz)         Attenuation (dB/100 ft.)           0.7         0.9           1.5         1.8           2.7         3.8           5.1         5.6           6.0         6.7           7.5         8.2           9.5         11.1           11.4         11.4           Rating (W)           3427		SWR
Maximum V Descript Nom. Attent 7 Freq. (MI 30 50 150 220 450 900 1500 1500 1500 1500 2500 3000 2500 3000 3500 4500 5800 6000 Max. Power Freq. (MI 30 50 150 150 150 150 150 150 150	ion         Freq. (MHz)         Start Freq. (           0         5           uation:         4           Hz)         Attenuation (dB/100 ft.)           0.7         0.9           1.5         1.8           2.7         3.8           5.1         5.6           6.0         6.7           7.5         8.2           9.5         11.1           11.4         11.4           Rating (W)           3427           2588           1428		SWR
Maximum V      Descript      Nom. Attent      Freq. (MI     30     50     150     220     450     900     1500     2500     3000     3500     4500     5800     6000  Max. Power      Freq. (MI     30     50     150     220	ion         Freq. (MHz)         Start Freq. (           0         5           uation:         4           Hz)         Attenuation (dB/100 ft.)           0.7         0.9           1.5         1.8           2.7         3.8           5.1         5.6           6.0         6.7           7.5         8.2           9.5         11.1           11.4         11.4           Rating (W)           3427         2588           1428         1195		
Maximum V      Descript      Nom. Attenu      Freq. (MI     30     50     150     220     450     900     1500     1500     2500     3000     3500     4500     5800     6000      Max. Power      Freq. (MI     30     50     150     220     450	ion         Freq. (MHz)         Start Freq. (           0.7         0.7           0.9         1.5           1.5         3.8           5.1         5           5.6         6           6.7         7.5           8.2         9.5           11.1         11.4           11.4         11.4           Rating (W)           3427           2588         1428           1195         817		

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#### ENGLISH 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.

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