Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



7977WB Coax - Low Loss 50 Ohm Wireless RF Transmission Cable



For more Information please call

1-800-Belden1



General Description:

5.5 AWG solid .176" bare copper-covered aluminum conductor, foam HDPE insulation, Duobond® II (100% coverage) plus a tinned copper braid shield (85% coverage), flooded water-resistant polyethylene jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	5.5	Solid	BCCA - Bare Copper Covered Aluminum	.176

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FHDPE - Foam High Density Polyethylene	.455

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	85

Outer Shield Flooding Grease: PO - Polyolefin

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Overall Cable

Overall Nominal Diameter: 0.590 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +80°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	163 lbs/1000 ft.
Max. Recommended Pulling Tension:	290 lbs.
Min. Bend Radius/Minor Axis:	5.900 in.

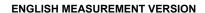
Applicable Specifications and Agency Compliance (Overall)

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

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EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005
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
Series Type:	RF 600
Suitability	
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - when supported by a messenger wire
Suitability - Burial:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



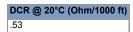
Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:



Nominal Outer Shield DC Resistance:



Maximum VSWR:

Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
5.000	2690.000	1.25:1
2690.000	3290.000	2.00:1
3290.000	6000.000	1.43:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
30	.46
50	.61
150	.98
220	1.18
450	1.72
900	2.54
1500	3.40
1800	3.77
2000	4.01
2500	4.58

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3000	5.07	
3500	5.56	
4500	6.44	
5800	7.56	
6000	7.75	

Max. Power Rating:

Freq. (MHz)	Rating (W)
30	5057
220	1975
450	1353
900	921
1500	691
1800	623
2000	587
3500	425
4500	368
5800	315
6000	308

Max. Operating Voltage - Non-UL:

Voltage 300 V RMS

Notes (Overall)

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7977WB 0101000	1,000 FT	147.000 LB	BLACK	С	#5H GIFPE SH LDPE
7977WB 010500	500 FT	74.000 LB	BLACK	С	#5H GIFPE SH LDPE

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 02-08-2010

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