

**7770.00A DBB90 Broadband Cross Polarized**

POLARIZATION: X-Pol  
 FREQUENCY (MHz): 824-960, 1710-2170  
 HORIZONTAL BEAM WIDTH (°): 90  
 GAIN (dBi/dBd): 13.5/11.4, 15.5/13.4  
 TILT: MET  
 LENGTH: 1.4m (4'7")

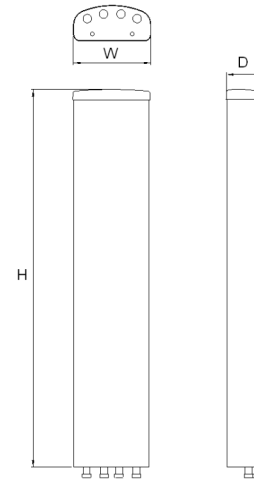
**PRELIMINARY**

**ELECTRICAL SPECIFICATIONS\***

Frequency range (MHz)	824-960		1710-2170		
	824-896	880-960	1710-1880	1850-1990	1900-2170
Frequency band (MHz)	824-896	880-960	1710-1880	1850-1990	1900-2170
Gain (dBi/dBd)	13.5/11.4	13.5/11.4	15.5/13.4	15.5/13.4	15.5/13.4
Polarization	Dual linear ±45°		Dual linear ±45°		
HPBW (°)	50		50		
VSWR	<1.5:1		<1.5:1		
Horizontal beam width, -3 dB (°)	90	90	90	90	90
Vertical beam width, -3 dB (°)	15	15	7	7	9.5
Electrical down tilt (°)	0 to 10		0 to 8		
Side lobe suppression, vertical 1st upper (dB)	>18,17,17x@0,5,10°	>18,17,17x@0,5,10°	>18,16,15x@0,4,8°	>18,16,15x@0,4,8°	>18,16,15x@0,4,8°
Isolation between inputs (dB)	30	30	30	30	30
Inter band Isolation (dB)	40		40		
Tracking, horizontal plane ±60° (dB)	<2.0	<2.0	<2.0	<2.0	<2.0
First null fill (dB)	<-25	<-25	<-25	<-25	<-25
Vertical beam squint (°)	0.5	0.5	0.5	0.5	0.5
Front to back ratio (dB)	>25	>25	>25	>25	>25
Front to back ratio, total power (dB)	>25	>25	>25	>25	>25
Cross polar discrimination (XPD) 0° (dB)	15	15	15	15	15
Cross polar discrimination (XPD) ±60° (dB)	>10	>10	>10	>10	>10
Far field coupling	-	-	-	-	-
IM3, 2xTx@43dBm (dBc)	<-153		<-153		
IM7, 2xTx@43dBm (dBc)	-		<-160		
Power handling, average per input (W)	300		250		
Power handling, average total (W)	600		600		

**MECHANICAL SPECIFICATIONS\***

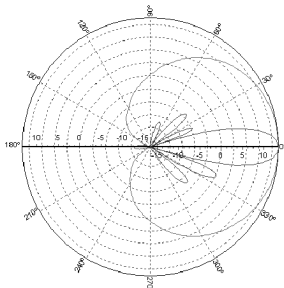
Connector	4 x 7/16 DIN Female
Connector position	Bottom
Dimensions, HxWxD, mm (ft)	1408x280x125mm
Mounting	Pre-mounted heavy duty brackets
Weight, with brackets, kg (lbs)	17.6 (39)
Weight, without brackets, kg (lbs)	12.1 (27)
Wind load, frontal/lateral/rear side 42 m/s Cd=1.6 (N)	952
Maximum operational wind speed, m/s (mph)	42 (93)
Survival wind speed, m/s (mph)	55 (123)
Lightning protection	DC grounded
Radome material	GRP
Packet size, HxWxD, mm (ft)	1550x355x255 (61"x1'2"x10")
Radome colour	Light Grey
Shipping weight, kg (lbs)	21.5 (47.4)
RET	7020.00, 7031.00, 7032.00, 7033.00
Brackets	7256.00, 7454.00, 2210.10



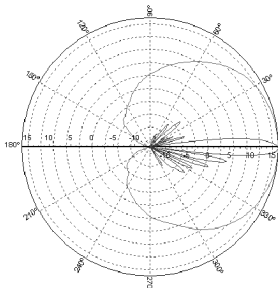
\*All specifications subject to change without notice. Please contact your Powerwave representative for complete performance data.

**ANTENNA PATTERNS\***

For detailed patterns visit <http://www.powerwave.com/rpa/>.



Typical Horizontal and Vertical Pattern for Above Antenna



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