

P90-15-XLH-MM Dual Broadband Antennas

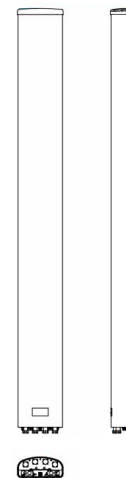
POLARIZATION: Dual Linear $\pm 45^\circ$
 FREQUENCY (MHz): 698-894, 1710-2170
 HORIZONTAL BEAM WIDTH ($^\circ$): 90, 90
 GAIN (dBi/dBd): 14.5/12.4 16.3/14.2
 TILT: 2-12, 0-8
 LENGTH: 72"

ELECTRICAL SPECIFICATIONS*

Frequency range (MHz)	698-894		1710-2170		
	698-806	806-894	1710-1880	1850-1990	1900-2170
Frequency band (MHz)	698-806	806-894	1710-1880	1850-1990	1900-2170
Gain (dBi/dBd)	13.8/11.7	14.5/12.4	15.7/13.6	16.0/13.9	16.3/14.2
Polarization	Dual Linear +/- 45		Dual Linear +/- 45		
Nominal Impedance (Ω)	50		50		
VSWR	< 1.5:1		< 1.5:1		
Horizontal beam width, -3 dB ($^\circ$)	86	84	88	80	80
Vertical beam width, -3 dB ($^\circ$)	14	12	7	6.5	6
Electrical down tilt ($^\circ$)	2 to 12		0 to 8		
Side lobe suppression, vertical 1st upper (dB)	> 16	> 16	> 18	> 17	> 15
Isolation between inputs (dB)	> 30	> 30	> 30	> 30	> 30
Inter band Isolation (dB)	> 40		> 40		
Tracking, horizontal plane $\pm 60^\circ$ (dB)	< 2	< 2	< 2	< 2	< 2
First null fill (dB)					
Vertical beam squint ($^\circ$)	< 0.8	< 0.8	< 0.5	< 0.5	< 0.5
Front to back ratio (dB) $180^\circ \pm 30^\circ$ copolar	25	25	> 23	> 27	> 30
Front to back ratio (dB) $180^\circ \pm 30^\circ$ total power	22	22	> 22	> 22	> 22
Cross polar discrimination (XPD) 0° (dB)	> 15	> 15	> 15	> 15	> 15
Cross polar discrimination (XPD) $\pm 60^\circ$ (dB)	10	10	10	10	10
Far field coupling					
IM3, 2xTx@43dBm (dBc)	-153		-153		
IM7, 2xTx@43dBm (dBc)					
Power handling, average per input (W)	500		300		
Power handling, average total (W)	1000		600		

MECHANICAL SPECIFICATIONS*

Connector	4 x 7/16 DIN Female, Extended Shank
Connector position	Bottom
Dimensions, HxWxD, mm (ft)	1829 x 305 x 186 (72" x 12" x 7.3")
Mounting	Pre-mounted Tilt Brackets
Weight, with brackets, kg (lbs)	29 (64)
Weight, without brackets, kg (lbs)	24 (53)
Wind load, frontal/lateral/rear side 42 m/s Cd=1.6 (N)	1380
Maximum operational wind speed, m/s (mph)	100 (45)
Survival wind speed, m/s (mph)	150 (67)
Lightning protection	DC Ground
Operating Temperature	-40 to +70C
Radome material	PVC
Packet size, HxWxD, mm (ft)	2225 x 400 x 225 (87" x 16" x 10")
Radome colour	Light Grey
Shipping weight, kg (lbs)	34 (75)
RET	iRET AISGv1.1, MET and AISGv2.0 Available
Brackets	7256.00, 7454.00, 2210.00



*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/>.