

P90-15-XLH-RR Dual Broadband Antennas

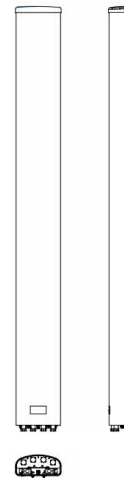
POLARIZATION: Dual Linear $\pm 45^\circ$
 FREQUENCY (MHz): 698-894, 1710-2170
 HORIZONTAL BEAM WIDTH ($^\circ$): 90, 90
 GAIN (dBi/dBd): 14.5/12.4 16.3/14.2
 TILT: 0-10, 0-8
 LENGTH: 72"

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 ($^\circ$) | 0 to 10 | | 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/>.