

**P65-18-XB-N****High Broadband X-Pol 1710-2690MHz**

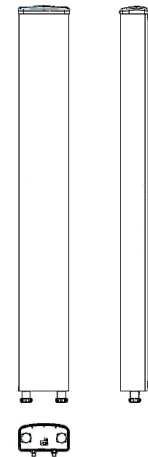
POLARIZATION: X-Pol  
 FREQUENCY (MHz): 1710-2690  
 HORIZONTAL BEAM WIDTH (°): 65  
 GAIN (dBi dBd): 18.1/16.0  
 TILT: 0-10°  
 LENGTH: 1.4m(55")

**PRELIMINARY****ELECTRICAL SPECIFICATIONS\***

|                                                               |                            |                   |                   |
|---------------------------------------------------------------|----------------------------|-------------------|-------------------|
| Frequency range (MHz)                                         | 1710-2690                  |                   |                   |
| Frequency band (MHz)                                          | 1710-1880                  | 1900-2170         | 2300-2690         |
| Gain (dBi/dBd)                                                | 17.6/15.5                  | 18.0/15.9         | 18.1/16.0         |
| Polarization                                                  | Dual linear $\pm 45^\circ$ |                   |                   |
| Nominal Impedance ( $\Omega$ )                                | 50                         |                   |                   |
| VSWR                                                          | <1.5:1                     |                   |                   |
| Horizontal beam width, -3 dB (°)                              | 68                         | 64                | 62                |
| Vertical beam width, -3 dB (°)                                | 7.0                        | 6.6               | 6.3               |
| Electrical down tilt (°)                                      | 0-10                       |                   |                   |
| Side lobe suppression, vertical 1st upper (dB)                | >15                        | >15               | >15               |
| Isolation between inputs (dB)                                 | >30                        | >30               | >30               |
| Tracking, horizontal plane $\pm 60^\circ$ (dB)                | <1.0                       | <1.0              | <1.0              |
| First null fill (dB)                                          | >-24 typical >-17          | >-24 typical >-17 | >-24 typical >-17 |
| Vertical beam squint (°)                                      | 0.5                        | 0.5               | 0.5               |
| Front to back ratio (dB) $180^\circ \pm 30^\circ$ copolar     | >30                        | >30               | >30               |
| Front to back ratio (dB) $180^\circ \pm 30^\circ$ total power | >27                        | >27               | >27               |
| Cross polar discrimination (XPD) $0^\circ$ (dB)               | >15                        | >15               | >15               |
| Cross polar discrimination (XPD) $\pm 60^\circ$ (dB)          | >10                        | >10               | >10               |
| Far field coupling                                            |                            |                   |                   |
| IM3, 2xTx&43dBm (dBc)                                         | <-153                      | <-153             |                   |
| IM7, 2xTx&43dBm (dBc)                                         |                            |                   | <-160             |
| Power handling, average per input (W)                         | 250                        |                   |                   |
| Power handling, average total (W)                             | 500                        |                   |                   |

**MECHANICAL SPECIFICATIONS\***

|                                                           |                                      |
|-----------------------------------------------------------|--------------------------------------|
| Connector                                                 | 2x7/16 DIN Female                    |
| Connector position                                        | Bottom                               |
| Dimensions, HxWxD, mm(ft)                                 | 1409x167x89.5 mm (4'3"x6"x3")        |
| Mounting                                                  | Pre-mounted standard brackets        |
| Weight, with brackets, kg (lbs)                           | 10.5(23.1)                           |
| Weight, without brackets, kg (lbs)                        | 6.8(15)                              |
| Wind load, frontal/lateral/rear side 42 m/s<br>Cd=1.6 (N) | 281 / 71 / 328                       |
| Maximum operational wind speed, m/s (mph)                 | 42 (93)                              |
| Survival wind speed, m/s (mph)                            | 55 (123)                             |
| Lightning protection                                      | DC grounded                          |
| Operating Temperature                                     | -40°C to +60°C                       |
| Radome Material                                           | PVC                                  |
| Radome colour                                             | Light Gray                           |
| Packing size, HxWxD, mm (ft)                              | 1580x200x200mm (4'10"x8"x8")         |
| Shipping weight, kg (lbs)                                 | 14.2 (31.3)                          |
| RET                                                       | 8110.10 (AISG1.1), 8110.40 (AISG2.0) |
| Brackets                                                  | 7456.00A                             |



\*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/>.