

## P65-18-XXB-N

## Dual High Broadband X-Pol 1710-2690MHz

POLARIZATION: XX-Pol  
 FREQUENCY (MHz): 2x1710-2690  
 HORIZONTAL BEAM WIDTH (°): 65  
 GAIN (dBi dBd): 18.1/16.0, 18.1/16.0  
 TILT: 0-10°/0-10°  
 LENGTH: 1.4m(55")

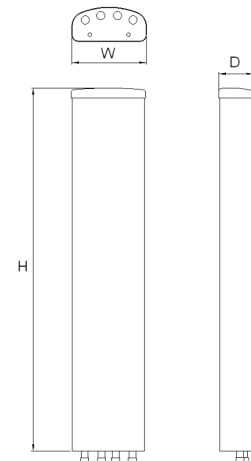
## PRELIMINARY

## ELECTRICAL SPECIFICATIONS\*

| Electrical Specifications                                     | 2x1710-2690                |                   |                   |
|---|----------------------------|-------------------|-------------------|
|   | 1710-1880                  | 1900-2170         | 2300-2690         |
| Frequency range (MHz)   |                            |                   |                   |
| 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)                             | 1000                       |                   |                   |

## MECHANICAL SPECIFICATIONS\*

|  |                                      |
|--|--------------------------------------|
| Connector  | 4x7/16 DIN Female                    |
| Connector position                                     | Bottom                               |
| Dimensions, HxWxD, mm(ft)                              | 1420x343x100 (4'4"x1'1"x3")          |
| Mounting   | Pre-mounted standard brackets        |
| Weight, with brackets, kg (lbs)                        | 19.5 (42.9)                          |
| Weight, without brackets, kg (lbs)                     | 14 (30.8)                            |
| Wind load, frontal/lateral/rear side 42 m/s Cd=1.6 (N) | 520 / 63 / 582                       |
| 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)                           | 1530x400x200 (4'8"x1'3"x7")          |
| Shipping weight, kg (lbs)                              | 23.5 (51.8)                          |
| RET  | 8110.10 (AISG1.1), 8110.40 (AISG2.0) |
| Brackets   | 7456.00                              |



\*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/>.