

# 8780.0ST.B100.04 i-RET ANTENNA TBB65 1.4m ALXT-824-960/1710-2170-65-14.7i/15i/15i-Ai-D

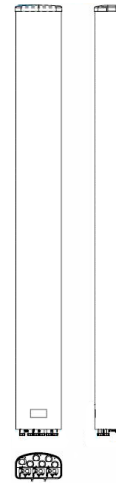
POLARIZATION: XXX-Pol  
 FREQUENCY (MHz): 824-960, 2x1710-2170  
 HORIZONTAL BEAM WIDTH (°): 65  
 GAIN (dBi/dBd): 14.7/12.6, 14.6/12.5, 14.6/12.5  
 TILT: 0-20°/0-12°/0-12°  
 LENGTH: 1.4m(4'7")

## ELECTRICAL SPECIFICATIONS\*

|  | 824-960                   |                           | 2x1710-2170               |                           |                           |
|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|  | 806-894                   | 880-960                   | 1710-1880                 | 1850-1990                 | 1920-2170                 |
| Frequency range (MHz)                          | 824-960                   |                           | 2x1710-2170               |                           |                           |
| Frequency band (MHz)                           | 806-894                   | 880-960                   | 1710-1880                 | 1850-1990                 | 1920-2170                 |
| Gain (dBi/dBd)                                 | 14.1/12                   | 14.7/12.6                 | 14.4/12.3                 | 14.6/12.5                 | 14.8/12.7                 |
| Polarization                                   | Dual linear ±45°          |                           | Dual linear ±45°          |                           |                           |
| Nominal Impedance (Ω)                          | 50                        |                           | 50                        |                           |                           |
| VSWR   | <1.5:1                    |                           | <1.5:1                    |                           |                           |
| Horizontal beam width, -3 dB (°)               | 71                        | 67                        | 65                        | 64                        | 64                        |
| Vertical beam width, -3 dB (°)                 | 14.9                      | 13.9                      | 13.3                      | 12.6                      | 12                        |
| Electrical down tilt (°)                       | 0 - 20                    |                           | 0 - 12                    |                           |                           |
| Side lobe suppression, vertical 1st upper (dB) | >18,17,16,16@<br>2,4,8,12 | >17,16,15,14@<br>2,4,8,12 | >17,16,15,14@<br>0,4,8,12 | >17,16,15,14@<br>0,4,8,12 | >17,16,15,14@<br>0,4,8,12 |
| Isolation between inputs (dB)                  | >30                       | >30                       | >30                       | >30                       | >30                       |
| Inter band Isolation (dB)                      | >38                       |                           | >38                       |                           |                           |
| Tracking, horizontal plane ±60° (dB)           | <1                        | <2                        | <1.5                      | <1.2                      | <4                        |
| First null fill (dB)                           | 25                        | 25                        | 25                        | 25                        | 25                        |
| Vertical beam squint (°)                       | 0.7                       | 0.7                       | 0.7                       | 1                         | 1                         |
| Front to back ratio (dB)                       | >27                       | >28                       | >28                       | >28                       | >28                       |
| Front to back ratio, total power (dB)          | >24                       | >24                       | >24                       | >24                       | >24                       |
| Cross polar discrimination (XPD) 0° (dB)       | 15                        | 14                        | 16                        | 18                        | 18                        |
| Cross polar discrimination (XPD) ±60° (dB)     | > 9.3                     | >7.7                      | >6                        | >5.5                      | > 5.5                     |
| Far field coupling                             | < 0.35                    | < 0.50                    | < 0.55                    | < 0.74                    | < 0.74                    |
| 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                       |                           | 500                       |                           |                           |

## MECHANICAL SPECIFICATIONS\*

|  |  |
|--|--|
| Connector  | 6x 7/16 DIN Female 4x AISG                       |
| Connector position                                     | Bottom   |
| Dimensions, HxWxD, mm (ft)                             | 1408x280x155mm (4'7"x11"x6")                     |
| Mounting   | Pre-mounted heavy duty brackets                  |
| Weight, with brackets, kg (lbs)                        | 18.5 (40.9)                                      |
| Weight, without brackets, kg (lbs)                     | 13 (28.6)  |
| Wind load, frontal/lateral/rear side 42 m/s Cd=1.6 (N) | 415  |
| Maximum operational wind speed, m/s (mph)              | 42 (93)  |
| Survival wind speed, m/s (mph)                         | 55 (123)   |
| Lightning protection                                   | DC grounded                                      |
| Operating Temperature                                  |  |
| Radome material  | ASA  |
| Package size, HxWxD, mm (ft)                           | 1550x355x200 (5'1"x1'2"x7")                      |
| Radome colour  | Light Grey                                       |
| Shipping weight, kg (lbs)                              | 22.5 (49.6)                                      |
| RET  | AISG1.1 (AISG2.0/Ericsson) on RED & WHITE system |
| Brackets   | 7256.00, 2210.10, 7454.00A                       |



\*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/>.