

# Quad-Port Antenna

## CMA-BDHH/3324/E0-6

**XX-Pol: 1710-2180 / 1710-2180**

**Electrical specification:**

|                                                         |                                                       |           |           |
|---------------------------------------------------------|-------------------------------------------------------|-----------|-----------|
| Frequency range per input (MHz)                         | 4 x 1710-2180                                         |           |           |
| Frequency band definitions (MHz)                        | 1710-1880                                             | 1850-1990 | 1920-2180 |
| Polarization                                            | Dual linear $\pm 45^\circ$                            |           |           |
| Gain (dBi)                                              | 23.0                                                  | 23.4      | 23.8      |
| Horizontal = 3 dB beam width ( $^\circ$ ) $\pm 3^\circ$ | 34                                                    | 34        | 33        |
| Vertical = 3 dB beam width ( $^\circ$ ) $\pm 0.6^\circ$ | 4.5                                                   | 4.2       | 4.0       |
| Adjustable electrical down tilt ( $^\circ$ )            | 0 - 6                                                 |           |           |
| Front to back ratio, $\pm 30^\circ$ total power (dB)    | >28                                                   |           |           |
| Horizontal side lobe suppression, typ (dB)              | >16                                                   |           |           |
| First upper side lobe suppression (dB)                  | 0 $^\circ$ , 3 $^\circ$ , 6 $^\circ$<br>>19, >16, >16 |           |           |
| First null fill below horizon, typ. (dB)                | < 20                                                  |           |           |
| Cross-polar discrimination +/-0 $^\circ$ (dB)           | > 17                                                  |           |           |
| Cross-polar discrimination +/-30 $^\circ$ (dB)          | > 7                                                   |           |           |
| VSWR                                                    | < 1.5:1                                               |           |           |
| Isolation between inputs (dB)                           | > 30                                                  |           |           |
| Antenna efficiency*                                     | 92 %                                                  |           |           |
| Inter modulation, IM3 (dBc)                             | <-153 @2x43 dBm                                       |           |           |
| Nominal impedance                                       | 50 $\Omega$                                           |           |           |
| Max power per input                                     | 500 W                                                 |           |           |

**Mechanical specification:**

|                            |                                      |
|----------------------------|--------------------------------------|
| Connectors                 | 4 x 7/16 female                      |
| Connector position         | Bottom                               |
| Lightning protection       | DC grounded                          |
| Height/Width/Depth mm (in) | 2060 (81.1) / 580 (22.8) / 155 (6.1) |
| Antenna weight             | 48 kg (106.7 b)                      |

Wind load at 42 m/s (94 mph) :

|                     |                      |
|---------------------|----------------------|
| Frontal:            | 1160 N (261 lbf)     |
| Lateral:            | 232 N (52 lbf)       |
| Rear:               | 1250 N (281 lbf)     |
| Survival wind speed | 67 m/s (150 mph)     |
| Colour radome       | Light Grey, RAL 7035 |
| Radome material     | ASA                  |

**Mounting hardware:**

|                           |                                    |
|---------------------------|------------------------------------|
| Mounting bracket          | 2                                  |
| Bracket weight (complete) | 7.0 kg (15.6 lb)                   |
| Pole diameter             | 50-120 mm (2.0-4.7 in)             |
| Tilt bracket              | 0 $^\circ$ - 5 $^\circ$ mechanical |

**Ordering information:**

|                        |        |
|------------------------|--------|
| CMA-BDHH/3324/E0-6/MET | 110540 |
| CMA-BDHH/3324/E0-6/RET | 110545 |

