

# Ultra-Wideband Dual Port Vehicular Antenna

## WBC2800M

The WBC2800M is a robust ultra-wideband dual port antenna effectively covering the VHF, UHF and SHF bands. It is well suited for high power ECM and tactical communication applications, especially where a multiple antenna set-up is not possible, or antenna co-location problems may occur.

- Two antennas integrated in the same mechanics, combining the advantage of a low visual signature with the capability for an extended frequency range
- High band, ground plane independent antenna positioned at the top for optimum coverage
- High power rating, more than 300 W in total



Product details*	
Frequency range	Port 1: 20 – 512 MHz Port 2: 500 – 8000 MHz
Polarization	Nominally vertical
Radiation pattern	Omnidirectional (typ. $\pm 1.5$ dB ripple)
Gain	See simulated patterns on Page 2
VSWR	Port 1: $\leq 3.5$ / Port 2: $< 3.5$
Nominal Impedance	50 $\Omega$
Power rating (RMS)	Port 1: 140 W Port 2: 500-1000 MHz: 200 W 1000-2000 MHz: 150 W 2000-4000 MHz: 100 W 4000-6000 MHz: 80 W 6000-8000 MHz: 40 W
Standard color	Black
Radiator	Aluminium enclosed in fibreglass radome with rubber coated shock absorption spring
Height	1750 mm
Weight	6.1 kg

Installation*	
RF connection	Two Female N-type connectors
Mounting	4-hole US pattern mount

\*Specific adjustments on request

Order number	
WBC2800M	Antenna as described above

## Environmental specifications

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Environmental specifications	
Temperature range (operating)	-40 ... +55 °C
Temperature range (storage)	-40 ... +85 °C
Humidity	MIL-STD-810E Method 507.3 Procedure III (cycle with extreme at 95 % RH, +60 °C)
Shock	MIL-STD-810F, Method 516.5 Procedure I (terminal peak sawtooth shock pulse, peak 40 g, duration 11 ms, three shocks in each of three orthogonal axes in both positive and negative direction)
Random Vibration	MIL-STD-810F, Method 514.5 Category 24 – All material – minimum integrity test, exposure levels according to Figure 514.5C-17
Blowing Rain	MIL-STD-810F, Method 506.4 Procedure I (rainfall rate 150 mm/h, wind speed 30 m/s)
Water Immersion	MIL-STD-810F, Method 512.4 Procedure I (depth 1 m)
Beam Impact Resistance	Impact at 40 km/h at 70 % height of the radiator
Wind Speed	160 km/h