

## Section 7

### DATA LINK ANTENNAS

Updated 24 November 2011

## Z2400-8RS Mast Mount ISM Band Collinear with Rear Reflector Screen

**Frequency**  
2.4 – 2.5 MHz

**Bandwidth**  
Full Band



**Z2400-8RS is a collinear mast mount antenna designed for wireless data link applications across the 2.4 to 2.5 GHz ISM band. The reflector screen restricts the radiation pattern emitted at the rear.**

85 cm tall, the antenna delivers 13 dBi forward gain with the rear screen fitted.

The front-to-back ratio is -20 dB.

Construction consists of copper internals, a robust white fibreglass radome, stainless steel mount tube and stainless steel rear reflector screen.

An N-Female connector rated for up to 50 watts input power is located at the base of the mount tube.

Two U-bolts are supplied for mounting the antenna to a round mast between 20 mm and 50 mm in diameter.

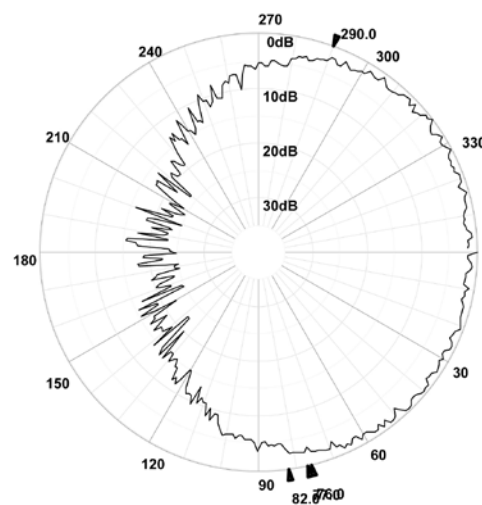
Signal loss will be high at ISM band data link frequencies. It is therefore most important to select a good quality low loss feeder cable according to the length of run required. Always keep the cable run to the shortest length necessary.

**RU400** low loss is recommended as the minimum standard of feeder cable necessary to reduce signal loss and maintain optimum antenna performance.

Connectors and other installation accessories can be supplied as you require.



SPECIFICATIONS	Z2400-8RS
<b>Construction</b>	Copper internals, white fibreglass radome, stainless steel mount tube, stainless steel rear reflector screen
<b>Frequency Range</b>	2.4 – 2.5 GHz full band
<b>VSWR</b>	Less than 1.5:1 across the full band
<b>Tuning</b>	Factory
<b>Gain</b>	13 dBi with rear screen fitted
<b>Maximum Power</b>	50 Watts
<b>Impedance (Nom.)</b>	50 Ohms
<b>DC Grounding</b>	Yes
<b>Polarisation</b>	Vertical
<b>E-Plane</b>	170°
<b>H-Plane</b>	17°
<b>Front-to-Back Ratio</b>	-20 dB
<b>Cable</b>	None
<b>Connector</b>	N-Female at base of the mount tube
<b>Dimensions</b>	85 cm high x 15 cm wide
<b>Weight</b>	1.25 kg
<b>Mounting</b>	2 x U-Bolts are supplied to suit a round mast between 20 mm and 50 mm in diameter



Vertical E-Plane Radiation Pattern  
at 2.4 GHz



High quality RU400 low loss feeder cable and N-Male crimp connector to suit are available to complete the installation.