

## **BROADBAND PROPAGATION**

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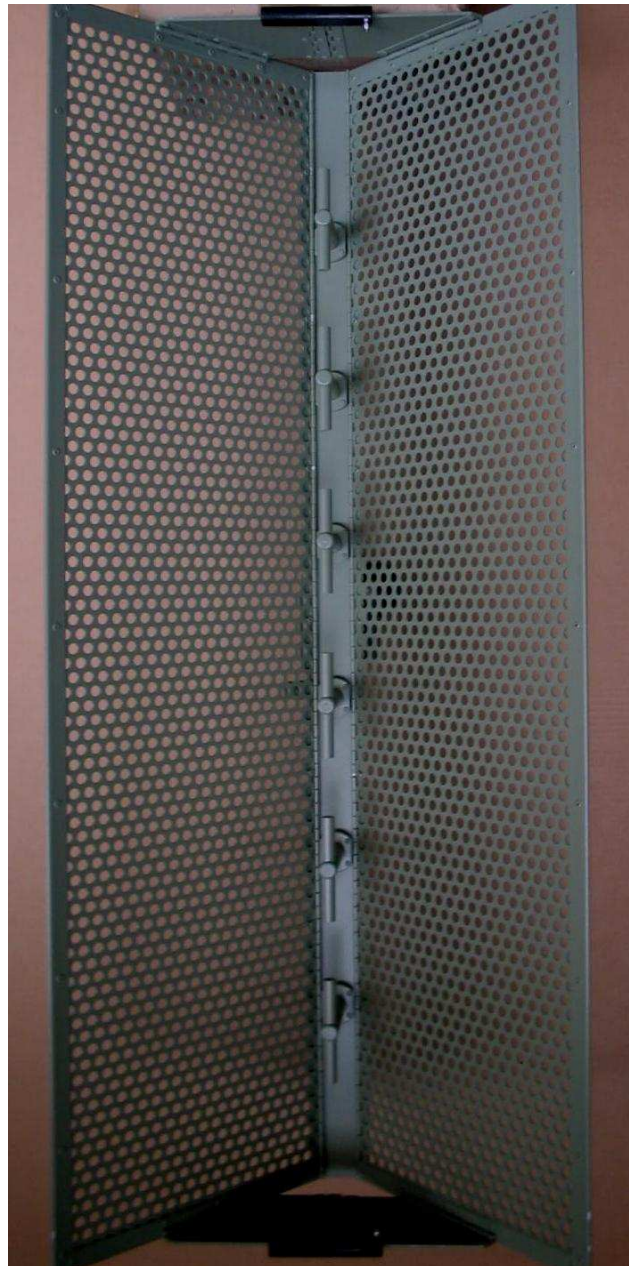
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### **BP25-13-186 BAND-3 CORNER REFLECTOR ANTENNA - Foldable**

#### **MANUAL & SPECIFICATIONS**



## 1. Description

The BP25-13-186 is a high-gain corner reflector antenna for Radio Relay Band 3 (1350-1850 MHz). Side and back-lobes are highly attenuated.

The antenna features low mass, low wind loading, rugged construction, and can be quickly folded flat for transport and storage. The antenna may be mounted horizontally for horizontal polarisation, or vertically for vertical polarisation.

Construction is of aluminium, stainless steel and acetal, with stainless steel mounting fittings.

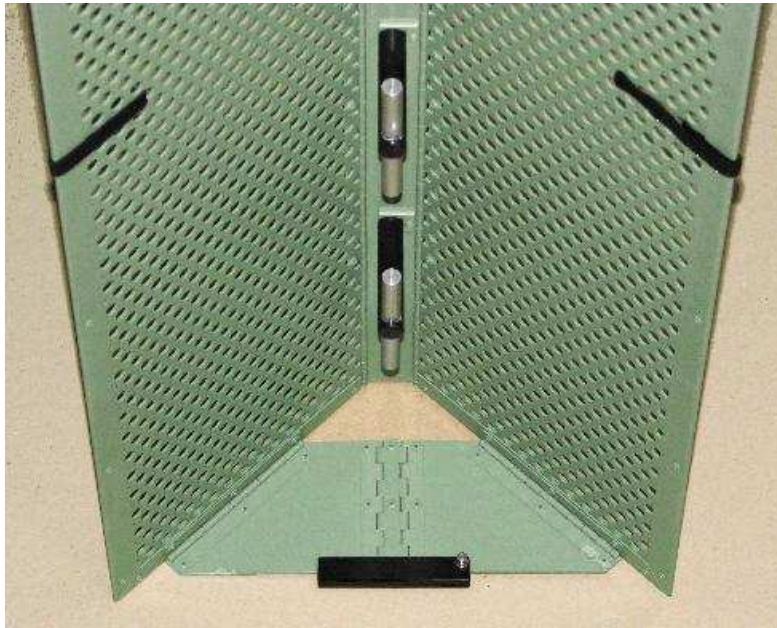
## 2. Mounting

The antenna is designed to be mounted on a 50mm OD support and can be mounted on the support vertically or horizontally, for vertical or horizontal polarisation.

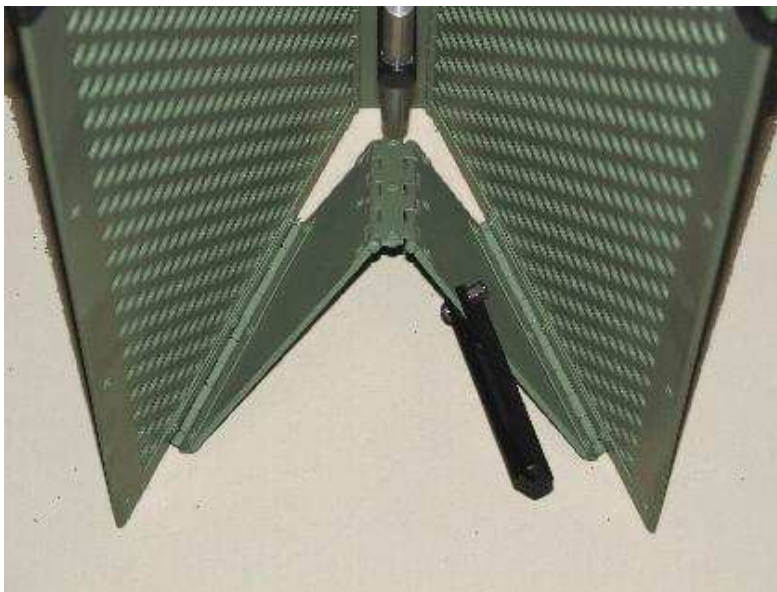


### 3. Folding the Antenna

Two acetal clasps hold the antenna in its open position as shown below. To fold the antenna these clasps are pulled outward and the two end plates are folded inward. Velcro straps at the centre of the antenna hold it in the folded position.



Antenna in the operating position showing clasps in locked position.



Partly folded antenna. Note that the end plates fold inward.

## 4. Specifications

### 4.1 Electrical

Frequency Range:	1350-1850 MHz
Gain:	> 18 dBi across operating band
Polarisation:	Horizontal or vertical
F/B Ratio:	E Plane >30 dB 0/90-270 deg. H Plane >30 dB 0/90-270 deg.
3dB (half power) Beam Width:	E Plane 6-12 deg. H Plane 40-52 deg
VSWR:	< 2:1
Power Rating:	25 watts
Input Connection:	N type female

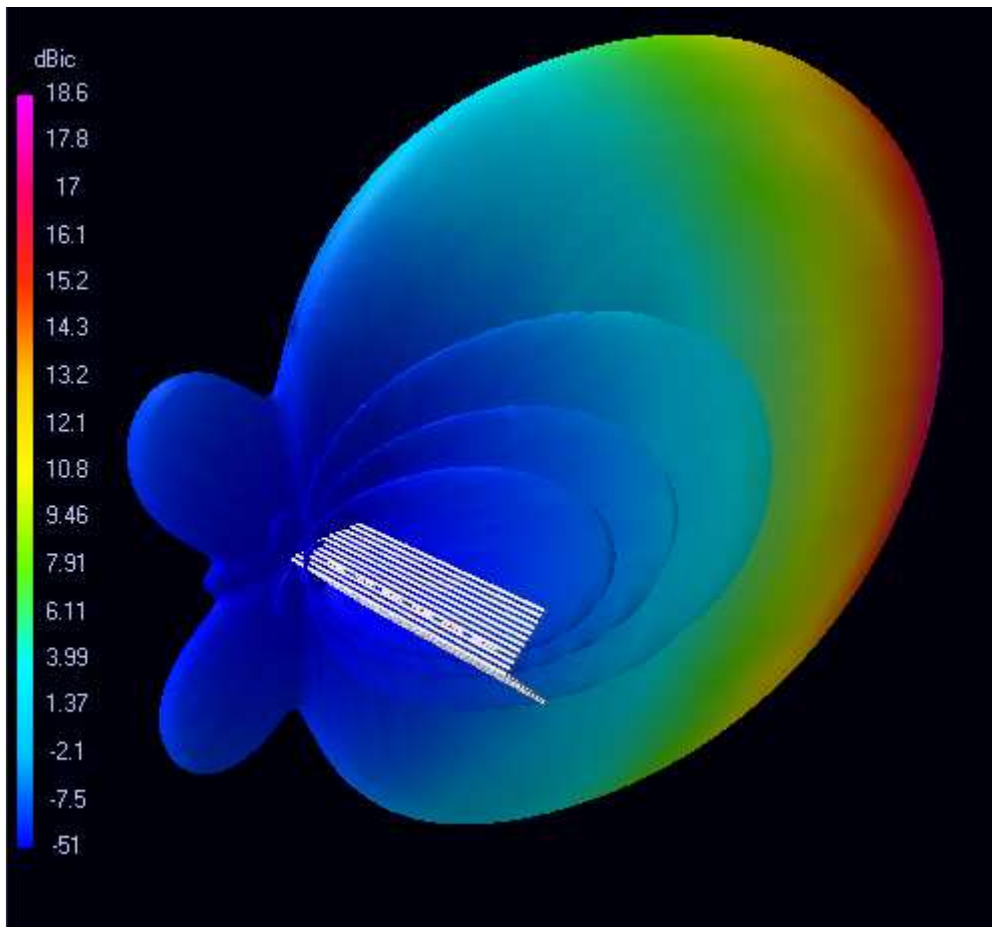
### 4.2 Mechanical

Mounting:	Mounts to 50mm shaft/ boom
Dimensions	
Operating:	1105 x 290 x 455mm
Folded:	1105 x 355 x 80mm
Antenna Weight:	5 kg

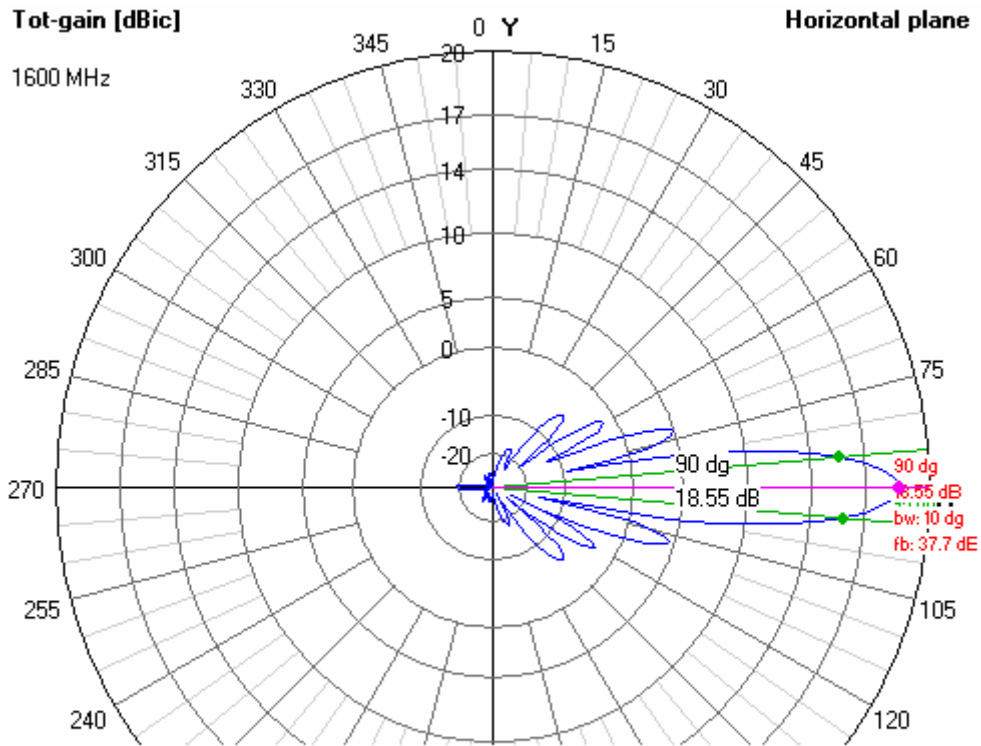
### 4.3 Environmental

Temperature:	-40 deg C to 90 deg C
Wind Speed Maximum:	40 m/s
Wind Load:	360 N (at 30 m/s)

### 4.4 Radiation Patterns



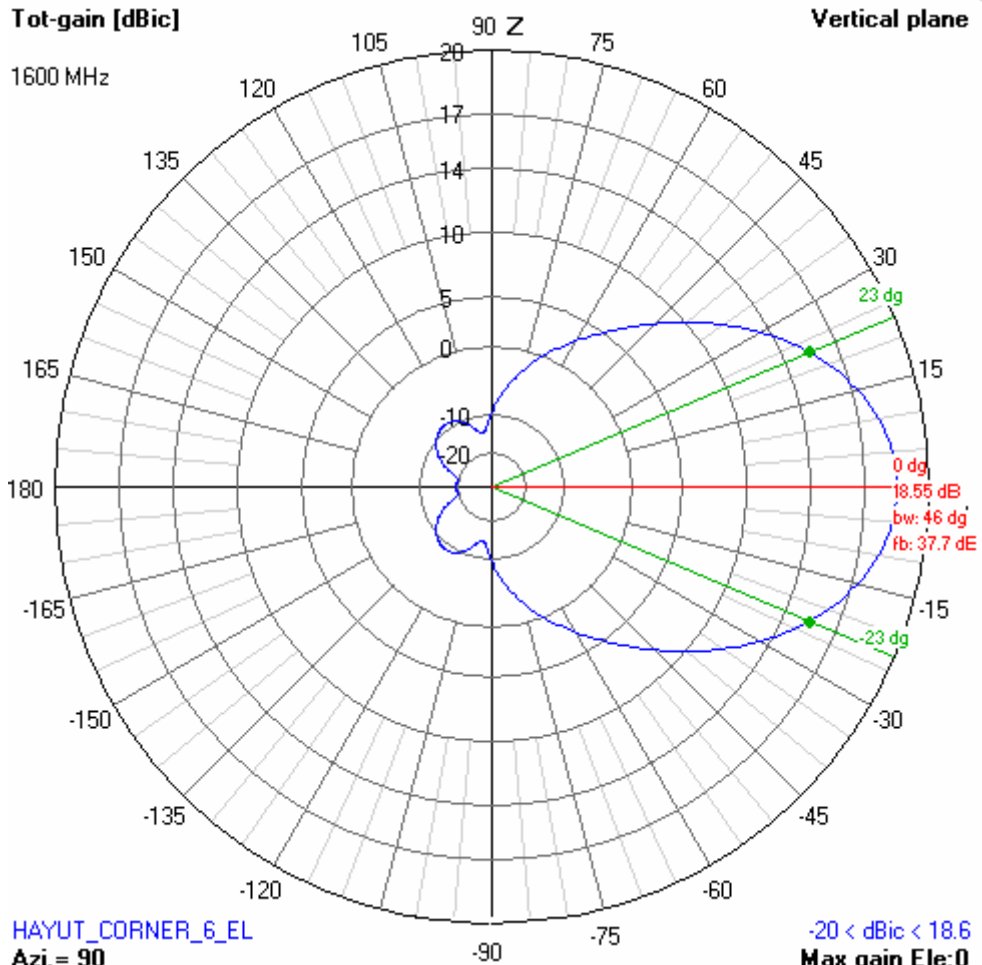
P25-13-186; 3D Free-Space Radiation Pattern @ 1600 MHz



HAYUT\_CORNER\_6\_EL  
Elev. = 0

-53 < dBic < 18.6  
Max gain Azi: 90

Free-Space, E Plane Radiation Pattern @ 1600 MHz



HAYUT\_CORNER\_6\_EL  
Azi. = 90

-20 < dBic < 18.6  
Max gain Ele: 0

Free-Space, H Plane Radiation Pattern @ 1600 MHz