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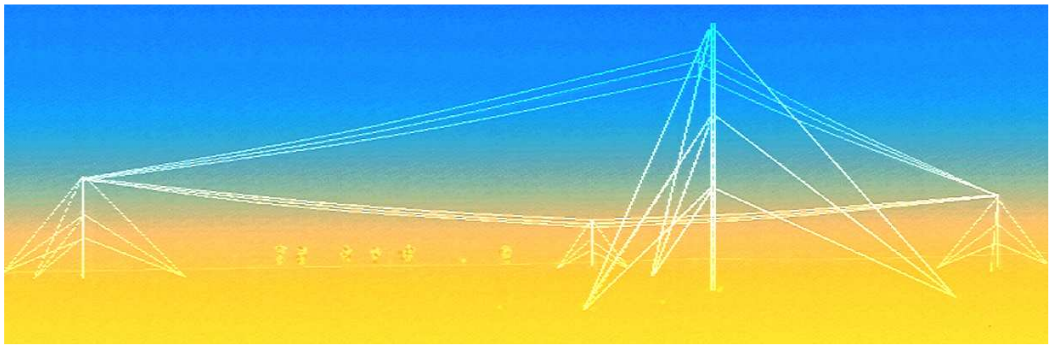
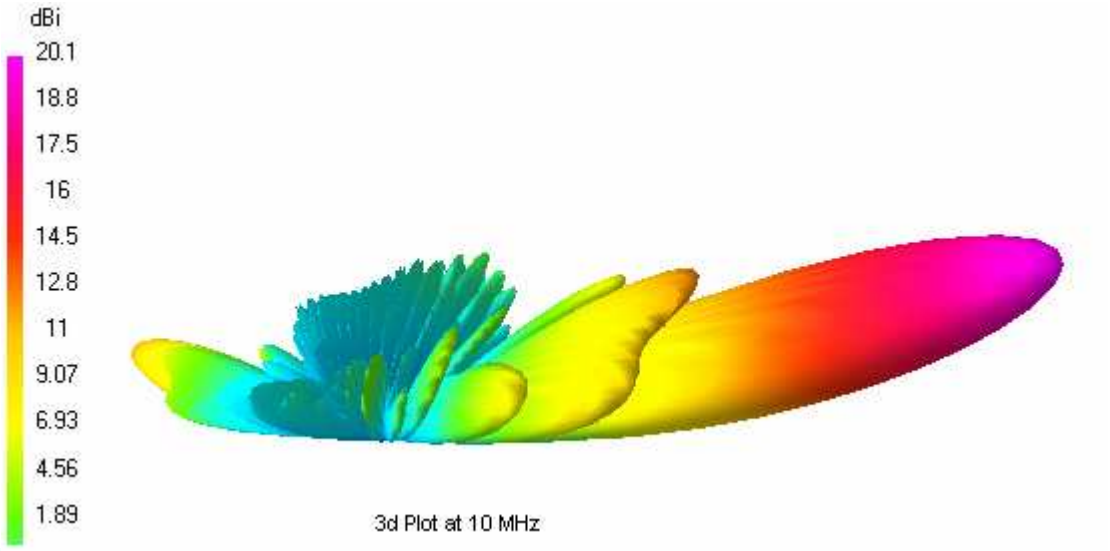
# HF BROADBAND RHOMBIC ANTENNA

## Model: BPRH-2-30



Rhombic antennas have high directional gain and low take-off angles and are best suited to long distance, point to point communications. Rhombic antennas suited to operation down as low as 2 MHz are large. The BPRH-2-30 requires four masts. Installation of the antenna Is simple and can be carried out without specialist skills.

Our HF Rhombic range offer a cost effective answer for permanent base stations where low take-off angle, and high directional gain is needed, with good radiation efficiency.



## Specifications: BPRH-2-30

### *Electrical*

**Frequency Range:** 2-30 MHz

**VSWR:** Better than 2.0 : 1 across band

**Main Lobe**

| Freq. MHz | Gain dBi | Take-off Angle ° | Power Efficiency % |
|---|---|---|---|
| 2 | 5.2 | 35 | 79 |
| 5 | 13.9 | 20 | 79 |
| 10 | 20.1 | 12 | 81 |
| 15 | 22.0 | 8 | 82 |
| 20 | 23.9 | 6 | 80 |
| 25 | 23.0 | 5 | 79 |
| 30 | 20.5 | 4 | 79 |

**Polarisation:** Horizontal

**Power Rating:** Antenna only (all Models) Max. 30 kW Average, 60 kW PEP,
Overall rating dependant on ratings of Balun and Termination pair
Which are available from 1-20 kW

**Input Impedance:** 50 ohms
**Input connection:** Dependant on balun power rating

### *Mechanical*

**Mast Height:** **3**0m
**Overall length:** 620m
**Overall Width:** 135m
**Wind Rating:** 150 km/hr

### *Construction*

All metal materials are of high grade stainless steel or hot-dip galvanised steel.
Ceramic insulators used throughout.

### *General*

The antenna is supplied with all fittings required for installation, masts are not included.
Masts may be quoted separately if you would like us to supply these also.
The antenna may be fed via coaxial cable to the tower mounted balun or can be fed via suitable balanced open wire line from the transmitter “hut”. Balun and termination requirements are dependant on the power rating require for the installation and are available from 1-20 kW.

## VERTICAL RADIATION PATTERNS