

Section 1

BASE STATION ANTENNAS

Updated 14 February 2011

Y815B2-DMH Yagi Directional Broadband 2-Stack Array

Frequency
700 – 960 MHz

Bandwidth
Any 60 MHz



Y815B2-DMH is a Yagi 2-Stack Array which produces a highly directional radiation pattern with high front-to-back ratio specifically designed for long distance point to point communication links operating across any 60 MHz bandwidth within the 700 to 960 MHz frequency range.

This 2-stack array can be manufactured in either a horizontal or vertical polarised configuration to produce genuine broadband coverage at better than 1.5:1 VSWR with 17 dBd forward gain.

Constructed from aluminium, the two 15 element Yagi antennas are welded to a 50 mm diameter mount tube together with a joining bar at the front to maintain the factory set Yagi boom spacing.

The array includes a 2-way RG59 phasing harness with an N-Female connector fitted rated for up to 100 watts input power.

A right-angle UAM90L heavy duty galvanised steel clamp is supplied for mounting the Yagi array to a mast between 40 mm and 75 mm in diameter. A strut kit is also supplied to support the boom.

Coaxial feeder cable, connectors and other mounting accessories are all available separately to complete the installation.



| SPECIFICATIONS | Y815B2-DMH |
|-------------------------------|--|
| Construction | Aluminium Yagi 2-Stack Array with welded mount tube and spacer |
| Frequency | 700 to 960 MHz |
| Bandwidth | Specify any 60 MHz when ordering |
| Return Loss, VSWR | Better than -15 dB, < 1.5:1 across the bandwidth specified |
| Tuning | Factory |
| Number Yagi's in Array | 2 |
| Elements each Yagi | 15 |
| Nominal Gain | 17 dBd |
| Polarisation | Specify either Horizontal or Vertical polarisation when ordering |
| Maximum Input Power | 100 Watts |
| Impedance | 50 Ohms |
| H-Plane | 14° |
| E-Plane | 28° |
| Front-to-Back Ratio | 18 dB |
| Cable Tail | 2-Way RG59 phasing harness supplied |
| Connector | N-Female fitted to the phasing harness |
| Boom Length | 1.85 metres |
| Longest Element | 210 mm |
| Array Weight | 6.1 kg |
| Projected Area | 0.170 m ² |
| Wind Load at 160 kph | 20 kg |
| Strut Kit | YSIO-48 supplied |
| Mounting Clamp | 1 x UAM90L supplied |

