

## Section 1

### BASE STATION ANTENNAS

Updated 19 July 2011

## Y815B2-DMH-ARRAY Yagi Directional Broadband 4-Stack Array

**Frequency**  
700 – 960 MHz

**Bandwidth**  
Any 60 MHz



Y815B2-DMH-ARRAY is a Yagi 4-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 4-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 20 dBd forward gain.

Constructed from aluminium, the 2 x 2 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 two-way RG59 phasing harness with an N-Female connector fitted rated for up to 100 watts input power.

2 x UAM90L heavy duty galvanised steel clamps are supplied for mounting the Yagi array to a round mast between 40 mm and 75 mm 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-ARRAY
<b>Construction</b>	Aluminium Yagi 4-Stack Array with welded mount tube and spacer
<b>Frequency</b>	700 to 960 MHz
<b>Bandwidth</b>	Specify any 60 MHz when ordering
<b>Return Loss, VSWR</b>	Better than -15 dB, < 1.5:1 across the bandwidth specified
<b>Tuning</b>	Factory
<b>Number Yagi's in Array</b>	4
<b>Elements each Yagi</b>	15
<b>Nominal Gain</b>	20 dBd
<b>Polarisation</b>	Specify either Horizontal or Vertical polarisation when ordering
<b>Maximum Input Power</b>	100 Watts
<b>Impedance</b>	50 Ohms
<b>H-Plane</b>	8°
<b>E-Plane</b>	10°
<b>Front-to-Back Ratio</b>	20 db
<b>Cable Tail</b>	PDD2 phasing harness supplied
<b>Connector</b>	N-Female fitted to the phasing harness
<b>Boom Length</b>	1.85 metres
<b>Longest Element</b>	210 mm
<b>Array Weight</b>	12.5 kg
<b>Projected Area</b>	0.340 m <sup>2</sup>
<b>Wind Load at 160 kph</b>	40 kg
<b>Strut Kit</b>	YSI-48 supplied
<b>Mounting Clamps</b>	2 x UAM90L supplied

