

800 MHz Yagi Antennas

540-1000 MHz

YB815 Series



The YB815 Series are high gain Low PIM yagi antennas which provide excellent point to point communications in RF control, short or long haul link, point to multipoint and other applications calling for highly directional antennas. YB815 Series antennas exhibit narrow beamwidths and high front to back ratios to help minimise any potential interference to and from other systems.

YB815 Series antennas can be configured in stacks or bays for higher gain applications in either horizontally or vertically polarised systems.

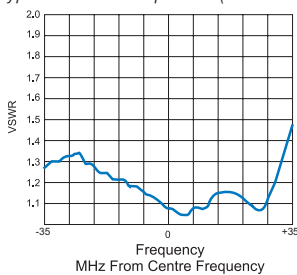
Termination is via an 'N' female coaxial connector fitted to a short 9302 Durathene cable tail. Durathene is a PTFE dielectric and polyethylene jacketed cable providing superior resistance to weathering and abrasion and is less susceptible to bird attack than standard PVC sheathed cables.



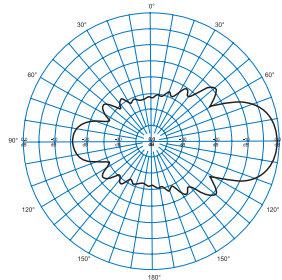
Features:

- All welded construction for maximum and reliable performance
- Narrow beamwidth & high front to back ratios effective in reducing interference
- Standard units feature alodine finish providing an excellent conductive surface for earthing. Full stainless steel versions also available
- Can be configured in stacks or bays for higher gain applications using PH and PHE series phasing harnesses
- DC grounding on all elements for the ultimate in lightning protection and dissipation of static noise
- -150dBc Passive Intermodulation (PIM) rated

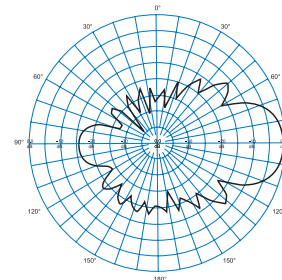
Typical VSWR response (YB815-94)



YB815-94 - E Plane



YB815-94 - H Plane



Electrical

Model Number	YB815-81	YB815-82	YB815-94	YB815-99	YB820-82	YB820-94
Nominal Gain dBi (dBd)	14 (12)				16 (14)	
Frequency MHz	806 - 896	850 - 930	890 - 960	540 - 1000	850 - 930	890 - 960
Tuned Bandwidth	Full band			5.0%	Full band	
VSWR (Return Loss)	<1.5 :1 (14dB)					
Nominal Impedance Ω	50 Ohm					
Vertical Beamwidth°	30				27	
Horizontal Beamwidth°	30				24	27
Front / Back Ratio dB	20	18	17	17	18	
Input Power W	100					
Passive IM 3rd order dBc	-150					

Mechanical

Model Number	YB815-81	YB815-82	YB815-94	YB815-99	YB820-82	YB820-94
Construction	All welded aluminium with alodined finish					
Length m	1.6		2.6		2.3	2.2
Weight kg	1.0		0.9	1.6	1.3	
Termination	N female with short 9302 cable tail					
Mounting Area	100mm x 25mm diam. aluminium					
Suggested Clamps	1 x UCR1 + 1 x M-4528 bracing kit					
Projected Area cm ²	No ice	636	639	628	1067	846
	With ice	1539	1550	1514	2630	2121
Wind Load (Thrust) @ 160km/h N	75	76	74	126	102	100
Wind Gust Rating km/h	240			156	186	189
Torque @160 km/h Nm	53	53	52	152	104	100