

# 800 MHz Yagi Antennas

540-1000 MHz

YB815 Series



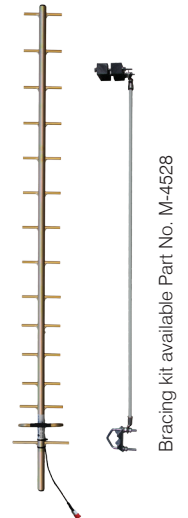
The YB815 Series are high gain Low PIM yagi antennas which provide excellent point to point communications in RF control, short or long haul link, point to multipoint and other applications calling for highly directional antennas. YB815 Series antennas exhibit narrow beamwidths and high front to back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

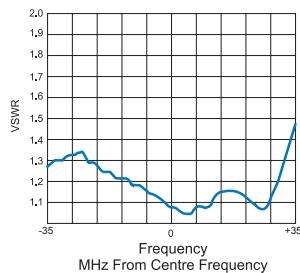
Termination is via an 'N' female coaxial connector fitted to a short 9302 Durathene cable tail. Durathene is a PTFE dielectric and polyethylene jacketed cable providing superior resistance to weathering and abrasion and is less susceptible to bird attack than standard PVC sheathed cables.

## Features:

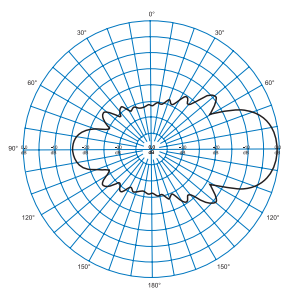
- All welded construction for maximum and reliable performance
- Narrow beamwidth & high front to back ratios effective in reducing interference
- Standard units feature alodine finish providing an excellent conductive surface for earthing. Full stainless steel versions also available
- Can be configured 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



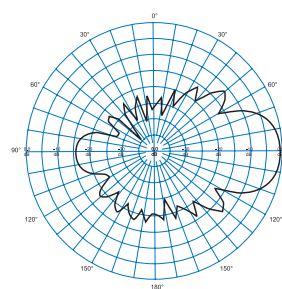
Typical VSWR response (YB815-94)



YB815-94 - E Plane



YB815-94 - H Plane



## Electrical

Model Number	YB815-81	YB815-82	YB815-94	YB815-99	YB820-81	YB820-82	YB820-94
Nominal Gain <i>dBi (dBD)</i>	14 (12)				16 (14)		
Frequency <i>MHz</i>	806-896	850-930	890-960	540-1000	806-896	850-930	890-960
Tuned Bandwidth	Full band			5.0%	Full band		
VSWR (Return Loss)	<1.5:1 (14dB)						
Nominal Impedance $\Omega$	50 Ohm						
Vertical bandwidth°	30				27		
Horizontal Beamwidth°	30				28	24	27
Front / Back Ratio <i>dB</i>	20	18	17	17	17	18	
Input Power <i>W</i>	100						

## Mechanical

Model Number		YB815-81	YB815-82	YB815-94	YB815-99	YB820-81	YB820-82	YB820-94
Construction		All welded aluminium with alodined finish.						
Length <i>m</i>		1.6			2.6	2.4	2.3	2.2
Weight <i>kg</i>		1.0		0.9	1.6	1.4	1.3	
Termination		N female with short 9302 cable tail						
Mounting Area		100mm x 25mm diam. aluminium						
Suggested Clamps		1 x UCR1 + x M-4528 bracing kit						
Projected Area <i>cm<sup>2</sup></i>	No ice	636	639	928	1067	909	863	846
	With ice	1539	1550	1514	2630	2270	2168	2121
Wind load (Thrust) @ 160km/h <i>N</i>		75	76	74	126	108	102	100
Wind Gust Rating <i>km/h</i>		240			156	166	186	189
Torque @ 160 km/h <i>Nm</i>		53	53	52	152	116	104	100