UHF Stainless Steel Yagi Antennas

400-600 MHz

YBSS6 Series

The YBSS6 Series is a range of high gain stainless steel yagi antennas which provide excellent point to point communications in highly corrosive environments. YBSS Series antennas exhibit narrow beamwidths and high front to back ratios to help minimise potential interference to and from other radio systems.

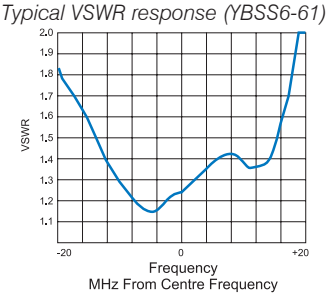
The antennas are constructed from 316 marine grade stainless steel with the passive elements through mounted to the boom and welded at each side. The feed element is of full folded dipole construction and is also welded to the boom to ensure low intermodulation performance and durability.

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

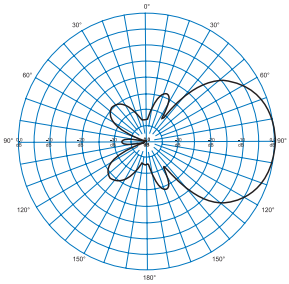
Features:

- All welded construction for maximum performance and reliability
- Deliver high front to back ratios - reducing interference to and from other radio systems
- Marine grade stainless steel construction ideal in highly corrosive environments
- Full folded dipole driven element construction for maximum reliability
- 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

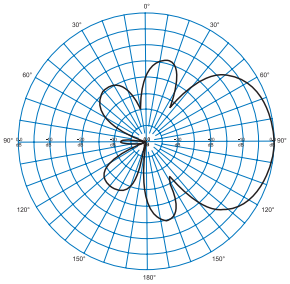
Typical VSWR response (YBSS6-61)



YBSS6-61 - E Plane



YBSS6-61 - H Plane



Electrical

Model Number	YBSS6-65	YBSS6-61	YBSS6-62	YBSS6-75	YBSS6-99
Nominal Gain *dBi (dBd)*	11 (9)				
Frequency *MHz*	400 - 420	450 - 480	480 - 520	580 - 610	350 - 600
Tuned Bandwidth	Full band				5%
VSWR (Return Loss)	<1.5 :1 (14dB)				
Nominal Impedance Ω	50				
Vertical Beamwidth°	47				
Horizontal Beamwidth°	56				
Front / Back Ratio *dB*	>18 (Typical)				
Input Power *W*	100				

Mechanical

Model Number		YBSS6-65	YBSS6-61	YBSS6-62	YBSS6-75	YBSS6-99
Construction		All welded stainless steel construction with polished finish				
Length *m*		0.9	1.0	0.8	0.8	1.3
Weight *kg*		0.7	0.7	0.6	0.6	0.8
Termination		N female with short 9008 cable tail				
Mounting Area		100mm x 25mm diam. stainless steel				
Suggested Clamps		1 X UNV				
Projected Area *cm²*	No ice	485	477	394	349	600
	With ice	1169	1099	967	857	1367
Wind Load (Thrust) @ 160km/h *N*		57	56	47	41	71
Wind Gust Rating *km/h*		>240				
Torque @160 km/h *Nm*		22	24	16	13	42

Copyright RF Industries Pty Ltd 2011. Subject to change without notice.