800 MHz Stainless Steel Yagi Antennas

540-1000 MHz

YBS809 Series



The stainless steel YBS809 series yagis are high gain Low PIM antennas specifically designed to cater for extreme and corrosive environments. They provide an excellent solution for point to point applications in RF control, short or long haul link, point to multipoint and other applications requiring highly directional antennas.

Manufactured from all welded 316 grade stainless steel these antennas provide identical performance to the YB809 series yagis but are better suited for extreme climatic or corrosive applications.

Termination is via an N female 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:

- Rugged construction 316 grade stainless steel for extreme conditions
- Broadband available in a number of models to cover trunking, cellular and ISM bands
- Narrow beamwidth and high front to back ratios
- Can be configured is stacks or bays for higher gain applications using PH and PHE series phasing harnesses
- Ideal for point to point or point to multipoint applications
- DC grounding on all elements for the ultimate in lightning protection and dissipation of static noise
- -150dBc Passive Intermodulation (PIM) rated

Electrical

Model Number	YBS809-81	YBS809-82	YBS809-94	YBS809-99		
Nominal Gain dBi (dBd)	12 (10)		13 (11)			
Frequency MHz	806 - 896	850 - 930	890 - 960	540 - 1000		
Tuned Bandwidth		5.0%				
VSWR (Return Loss)	<1.5 :1 (14dB)					
Nominal Impedance Ω	50					
Vertical Beamwidth°	43		41	44		
Horizontal Beamwidth°	49	49	48	51		
Front / Back Ratio dB	16	18	15	16		
Input Power W	100					
Passive IM 3rd order dBc	-150					

Mechanical

Model Number		YBS809-81	YBS809-82	YBS809-94	YBS809-99	
Construction		All welded stainless steel with polished finish				
Length m		0.9		1.0	1.4	
Weight kg		1.0			1.6	
Termination		N female with short 9302 cable tail				
Mounting Area		100mm of 25mm diam. stainless steel				
Suggested Clamps		1 x UCR1				
Projected Area cm²	No ice	358	341	370	589	
	With ice	874	838	870	1390	
Wind Load (Thrust) @ 160km/h N		42	40	44	70	
Wind Gust Rating km/h		240				
Torque @160 km/h Nm		15	13	16	40	