

## Y(B)8963

### Black or Gold anodized 896-970MHz fully welded 3 elements 6dBd Directional Yagi

Our premium series directional Yagi antennas are fully gold anodized for corrosion resistance. All UHF and above frequency antennas feature internal matching to assure broad bandwidth and resistance to severe weather conditions. There is no gamma match to ice up, corrode or detune. Our engineering staff has optimized the product family for forward gain by computer analysis and then field-tested each for conformance.

#### FEATURES AND BENEFITS

- All UHF and higher frequency antennas feature 360° welds around each element and an end-of-boom N connector feed with an internal transmission line feeding the driven element.
- Every Yagi is tuned on a network analyzer for best power match and lowest VSWR.
- All Yagi antennas ship complete with a high quality cast aluminum mounting kit that includes stainless steel hardware and allows vertical or horizontal orientation during installation (VHF models require light assembly).

#### APPLICATIONS

- Point-to-point and multi-point / omnidirectional outdoor antennas applications used by private organizations and government agencies around the globe.
- Typical applications include transportation such as railroad switching, remote locations reporting examples that include oil fields, weather conditions and, meter data transmissions for utilities.

ELECTRICAL	
Frequency Range	896 - 970 MHz
Frequency Bandwidth	74 MHz
VSWR	< 2.0:1
Return Loss	-10dB max
Nominal Gain	6 dBd
Front to Back Ratio	20 dB
Maximum Power	300 W
Nominal Impedance	50Ω
Polarization	Vertical or Horizontal
Pattern	Directional
Horizontal Beamwidth: (For Horizontal Polarization)	89°
Vertical Beamwidth: (For Vertical Polarization)	65°
Tuning	Fixed Tune
Transmitting / Receiving	Both

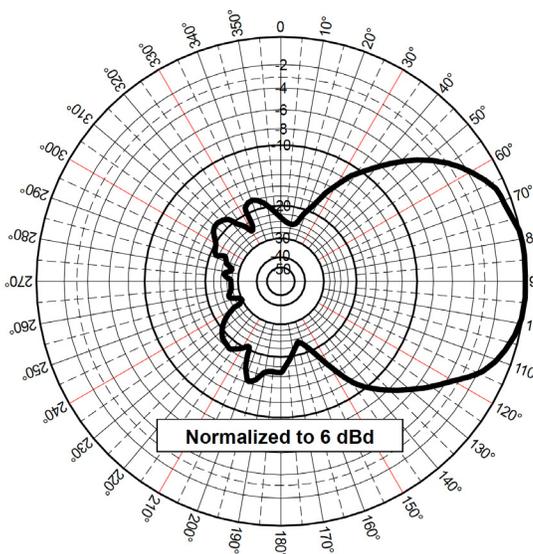
## MECHANICAL

Material	Aluminum
Length	16-3/4"
Height	7.125"
Boom Diameter	0.875"
Weight	3.28 lbs
Included	Heavy Duty Cast mount bracket accommodates 7/8" mast
Rated Wind Velocity	150mph (241kph)
Rated Wind Velocity (with 0.5" radial ice)	80mph (130kph)
Equivalent Flat Area	0.1918sq. ft.
Cable	None
Termination	N-female connector
Color	Gold or Black Anodized
Lightning Protection	Lightning Arrestor LABH350NN (Sold Separately)

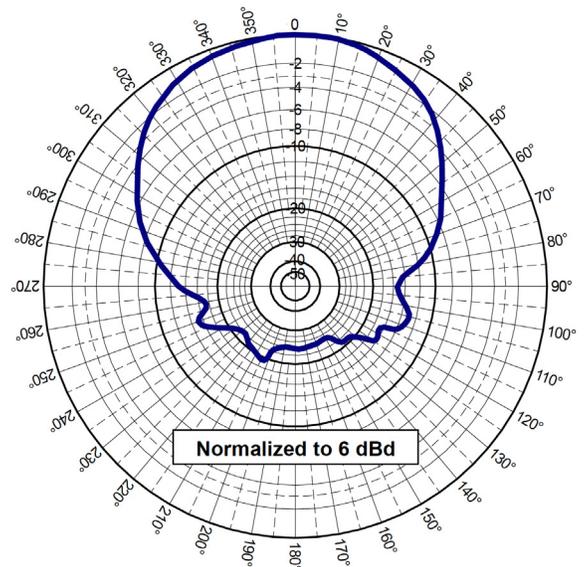
## CONFIGURATION

Y8963	Gold Anodized
YB8963	Black Anodized

## ANTENNA RADIATION PATTERN

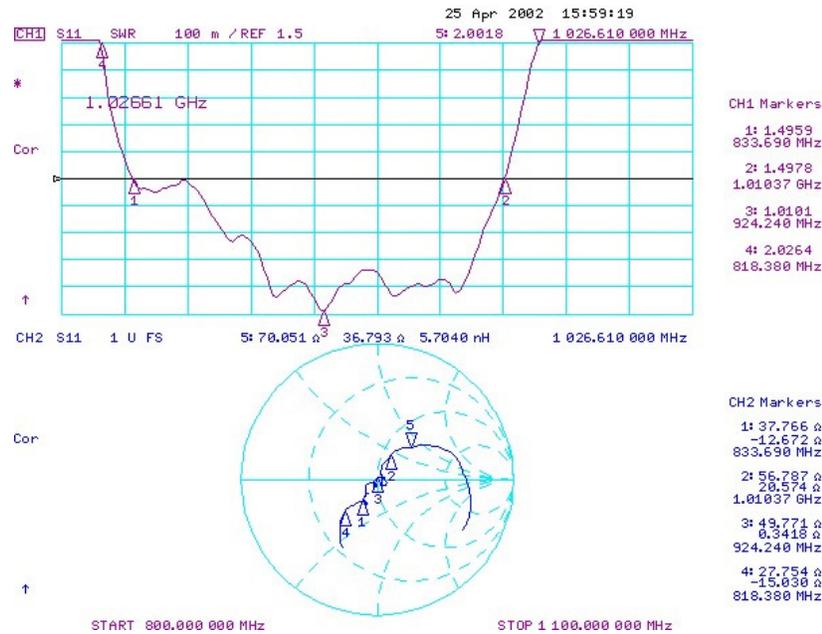


**Vertical-to-Vertical Polarization Azimuthal Pattern (X, Y or E-Plane)**



**Horizontal-to-Horizontal Polarization Elevation Pattern (Y, Z or H-Plane)**

## VSWR OF Y8963



### Y8963 Typical VSWR sweeps – Primary Specifications

Marker 1: 1.4959 to 1 @ 833 MHz

Marker 2: 1.4978 to 1 @ 1010 MHz

Marker 3: 1.0101 to 1 @ 924 MHz

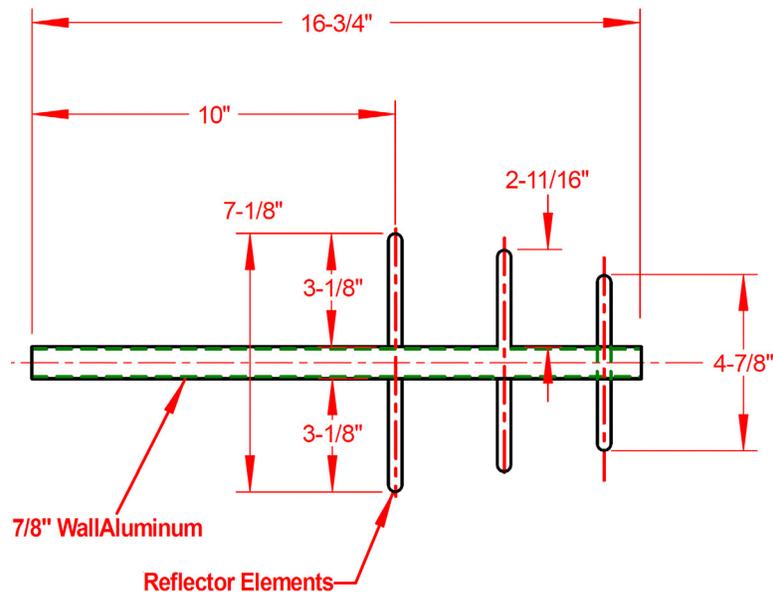
### Y8963 Typical VSWR sweeps – Secondary Specifications

Marker 4: 2.0264 to 1 @ 818 MHz

Marker 5: 2.0018 to 1 @ 1026 MHz

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## MECHANICAL DRAWING



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