

The Kathrein Scala Division YA7-155 and YA7-166 are ruggedly built broadband, folded dipole Yagi antennas, designed for control station, point-to-point, and SCADA applications.

Like all Kathrein Scala Division antennas, the YA7-155 and YA7-166 made of the finest materials using state of the art electrical and mechanical designs, resulting in superior performance and long service life.

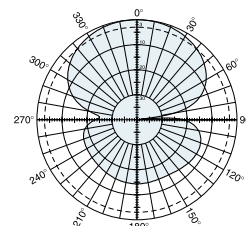
The YA7-155 and YA7-166 are gold anodized and may be used stand-alone or in stacked arrays for higher gain, increased side-lobe suppression, or custom azimuth patterns.



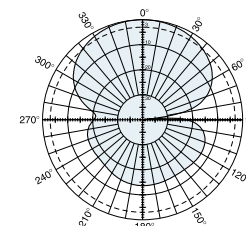
**Specifications:**

Frequency range	YA7-155	150–164 MHz
	YA7-166	160–174 MHz
Gain		7 dBd
Impedance		50 ohms
VSWR		< 1.35:1
Polarization		Horizontal or vertical
Front-to-back ratio		13 dB
Maximum input power		250 watts
E plane pattern		58 degrees (half-power)
H plane pattern		80 degrees (half-power)
Connector		Female 50Ω N
Weight		10 lb (4.51 kg)
Dimensions	YA7-155	55 x 39 x 5 inches (1397 x 991 x 127 mm)
	YA7-166	52 x 36 x 5 inches (1321 x 914 x 127 mm)
Equivalent flat plate area		1.44 ft <sup>2</sup> (0.133 m <sup>2</sup> )
Wind survival rating*		100 mph (160 kph)
Shipping dimensions	YA7-155	57 x 13 x 8 inches (1448 x 330 x 203 mm)
	YA7-166	54 x 13 x 8 inches (1372 x 330 x 203 mm)
Shipping weight		15 lb (6.8 kg)
Mounting		For masts of 2.375 inches (60 mm) OD.

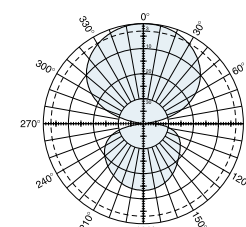
*See reverse for order information.*



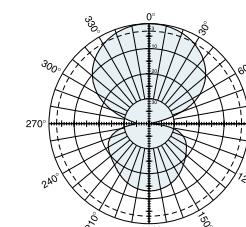
YA7-155 H-plane  
Horizontal pattern – V-polarization  
Vertical pattern – H-polarization



YA7-166 H-plane  
Horizontal pattern – V-polarization  
Vertical pattern – H-polarization



YA7-155 E-plane  
Horizontal pattern – H-polarization  
Vertical pattern – V-polarization

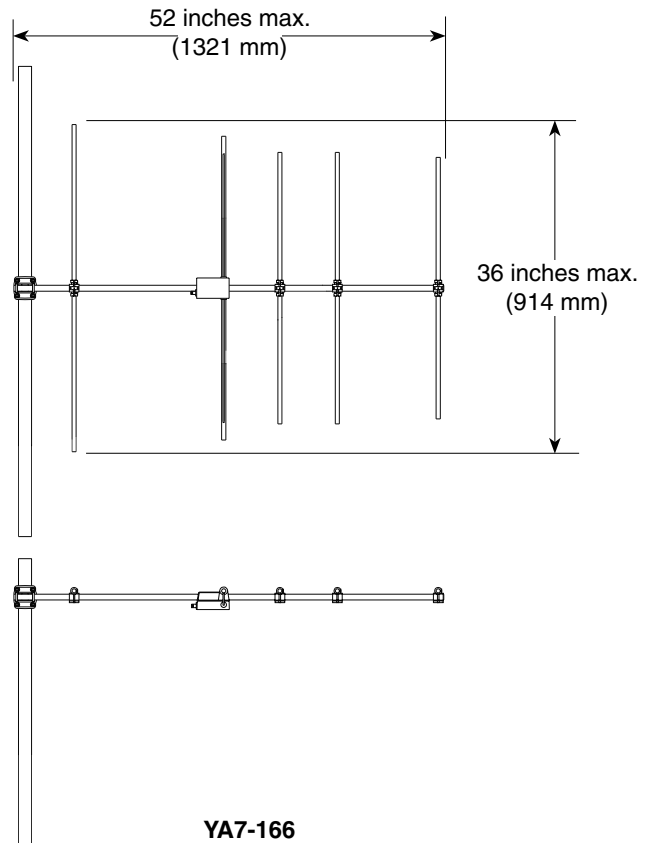
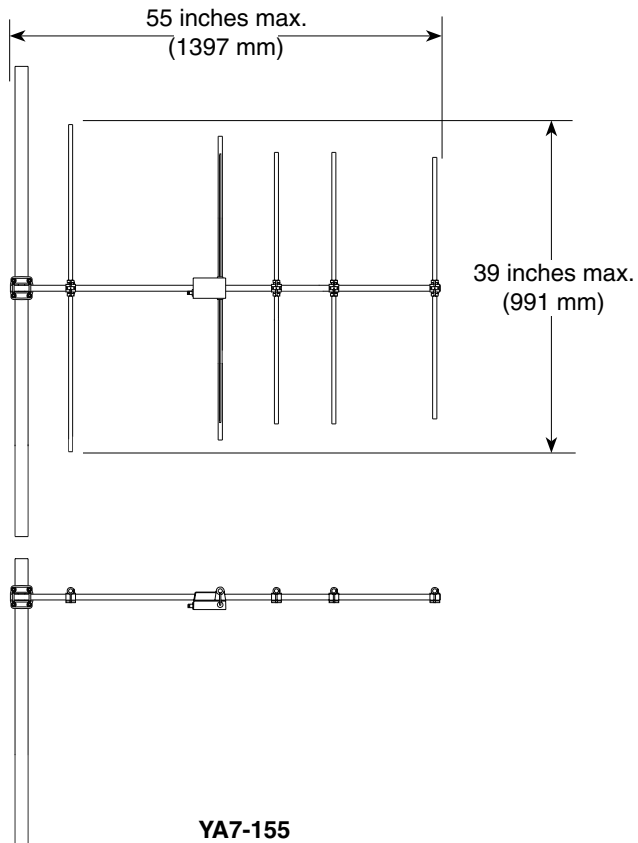


YA7-166 E-plane  
Horizontal pattern – H-polarization  
Vertical pattern – V-polarization

\* Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



10754-B



**Order Information:**

Model	Description
YA7-155	150–164 MHz antenna
YA7-166	160–174 MHz antenna

All specifications are subject to change without notice. The latest specifications are available at [www.kathrein-scala.com](http://www.kathrein-scala.com).

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991  
Email: [communications@kathrein.com](mailto:communications@kathrein.com) Internet: [www.kathrein-scala.com](http://www.kathrein-scala.com)