

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

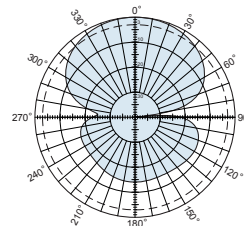
The YA7-155 and YA7-166 are anodized and may be used stand alone or in stacked arrays for higher gain, increased side-lobe suppression, or custom azimuth patterns.



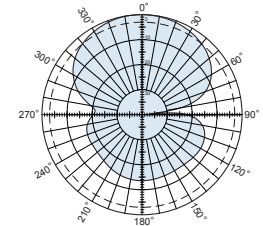
### Specifications

Frequency range	YA7-155 150—164 MHz
	YA7-166 160—174 MHz
Gain	7 dBd (9.15 dBi)
Impedance	50 ohms
VSWR	<1.35:1
Polarization	Horizontal or vertical
Front-to-back ratio	13 dB
Maximum input power	250 watts
H-plane beamwidth	80 degrees (half-power)
E-plane beamwidth	58 degrees (half-power)
Connector	N female
Weight	10 lb (4.5 kg)
Dimensions	
	YA7-155 55 x 38.8 x 5 inches (1397 x 986 x 127 mm)
	YA7-166 52.4 x 36.4 x 5 inches (1331 x 925 x 127 mm)
Wind load at 100 mph (161 kph)	
Front	40 lbf (178 N)
Wind survival rating*	100 mph (161 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	15.0 lb (6.8 kg)
Mounting	For masts of 2.375 inch (60 mm) OD.

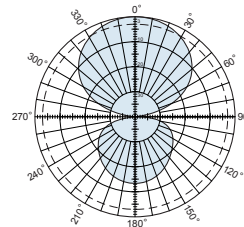
\*Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. Contact KBU for further details.



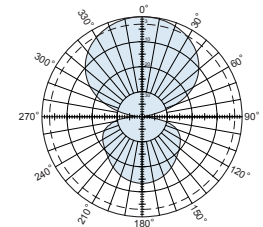
YA7-155 H-plane  
Horizontal pattern — V-polarization  
Vertical pattern — H-polarization



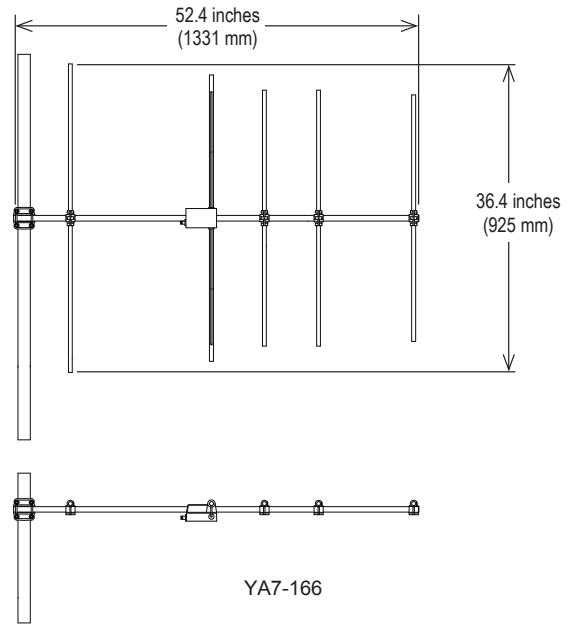
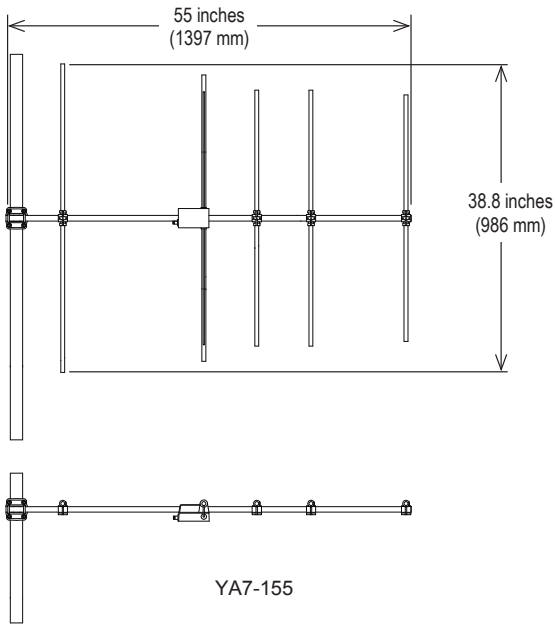
YA7-166 H-plane  
Horizontal pattern — V-polarization  
Vertical pattern — H-polarization



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



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



### Order information

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

30006a subject to alteration