

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.

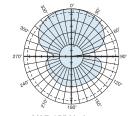
Like all Scala antennas, the YA7-155 and YA7-166 are made of the finest materials using state of the art electrical and mechanical designs resulting in superior performance and long service life.

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.

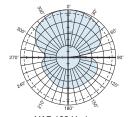
Specifications   YA7-155				
YA7-155	Specifications		,	
YA7-166         160—174 MHz           Gain         7 dBd (9.15 dBi)           Impedance         50 ohms           VSWR         <1.35:1           Polarization         Horizontal or vertical           Front-to-back ratio         13 dB           Maximum 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)         YA7-166 (1372 x 330 x 203 mm)	Frequency range			
Gain         7 dBd (9.15 dBi)           Impedance         50 ohms           VSWR         <1.35:1		YA7-155	150—164 MHz	
Impedance		YA7-166	160—174 MHz	
VSWR         <1.35:1	Gain		7 dBd (9.15 dBi)	
Polarization	Impedance		50 ohms	
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         (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)	VSWR		<1.35:1	
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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	Front-to-back ratio		13 dB	
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	Maximum input power	er	250 watts	
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)	H-plane beamwidth		80 degrees (half-power)	
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)	E-plane beamwidth		58 degrees (half-power)	
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)	Connector		N female	
YA7-155 55 x 38.8 x 5 inches	Weight		10 lb (4.5 kg)	
\( \frac{(1397 \times 986 \times 127 \times mm)}{YA7-166}  \frac{52.4 \times 36.4 \times 5 \times inches}{(1331 \times 925 \times 127 \times mm)} \)  Wind load at 100 mph (161 kph) \( \text{Front}  \text{40 lbf (178 N)} \)  Wind survival rating*  \text{100 mph (161 kph)} \)  Shipping dimensions  \( \text{YA7-155}  \frac{57 \times 13 \times 8 \times \text{inches}}{(1448 \times 330 \times 203 \text{ mm)}} \)  \( \text{YA7-166}  \frac{54 \times 13 \times 8 \times \text{inches}}{(1372 \times 330 \times 203 \text{ mm)}} \)  Shipping weight  \text{15.0 lb (6.8 kg)}	Dimensions			
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 44 x 13 x 8 inches (1372 x 330 x 203 mm)  Shipping weight 15.0 lb (6.8 kg)		YA7-155	55 x 38.8 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 (1372 x 330 x 203 mm)  Shipping weight 15.0 lb (6.8 kg)			(1397 x 986 x 127 mm)	
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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)	Wind survival rating*		100 mph (161 kph)	
\( \frac{(1448 \times 330 \times 203 \text{ mm})}{54 \times 13 \times 8 \text{ inches}} \\ (1372 \times 330 \times 203 \text{ mm}) \\ \end{array} \) Shipping weight \( 15.0 \text{ lb (6.8 kg)} \)	Shipping dimensions			
YA7-166 54 x 13 x 8 inches (1372 x 330 x 203 mm)  Shipping weight 15.0 lb (6.8 kg)		YA7-155	57 x 13 x 8 inches	
(1372 x 330 x 203 mm) Shipping weight 15.0 lb (6.8 kg)			(1448 x 330 x 203 mm)	
Shipping weight 15.0 lb (6.8 kg)		YA7-166	54 x 13 x 8 inches	
0			(1372 x 330 x 203 mm)	
Mounting For masts of 2.375 inch (60 mm) OD.	Shipping weight		15.0 lb (6.8 kg)	
	Mounting		For masts of 2.375 inch (60 mm) OD.	

<sup>\*</sup>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.

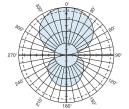




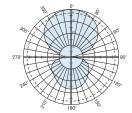
YA7-155 H-plane Horizontal pattern — V-polarization Vertical pattern — H-polarization



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



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

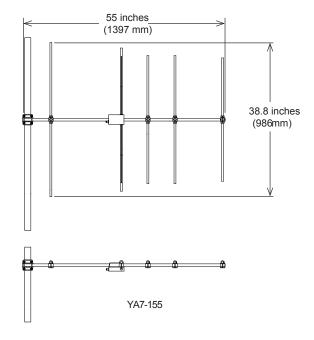


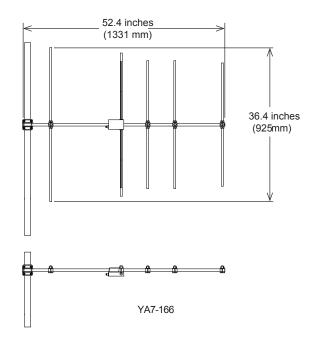
YA7-166 E-plane Horizontal pattern — H-polarization Vertical pattern — V-polarization

30006 subject to alteration

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## Order information

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