

The Scala TVO is a ruggedly built, horizontally polarized VHF-TV transmit antenna with an omnidirectional pattern.

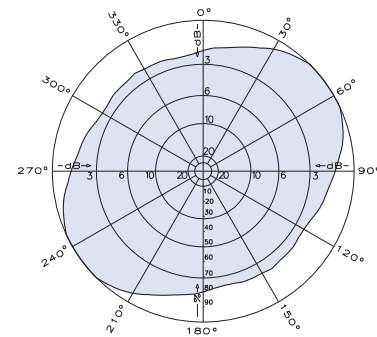
Like all Scala antennas, the TVO is made of the finest materials using state of the art electrical and mechanical designs resulting in superior performance and long service life.

The TVO is available as a single bay antenna or in vertically stacked arrays for additional gain.

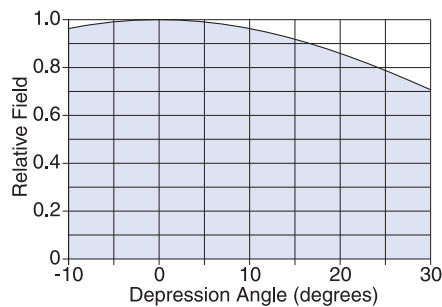


Specifications		
Frequency range	Any specified VHF-TV channel 54—216 MHz	
Gain	Gain	Power gain
TVO (one bay)	-3 dBd	0.5
TVO-2 (two bays)	0 dBd (1/2 spacing)	1
TVO-4 (four bays)	3 dBd (1/2 spacing)	2
Impedance	50 or 75 ohms	
VSWR	<1.3:1	
Polarization	Horizontal	
Maximum input power (per bay)	100 watts 75 ohm model 250 watts 50 ohm model	
Azimuth pattern	Omni	
Connector	N female	
Weight (approx.)		
TVO (one bay)	9 lb (4.1 kg)	
TVO-2 (two bays)	22.6 lb (10.3 kg)	
TVO-4 (four bays)	50.6 lb (23 kg)	
Height		
TVO (one bay)	18 inches (457 mm)	
TVO-2 (two bays)	See reverse	
TVO-4 (four bays)	See reverse	
Wind load at 100 mph (161 kph)		
Front	52 lbf (231 N) per bay	
Wind survival rating*	120 mph (193 kph)	
Mounting	For masts of 2.375 inch (60 mm) OD.	

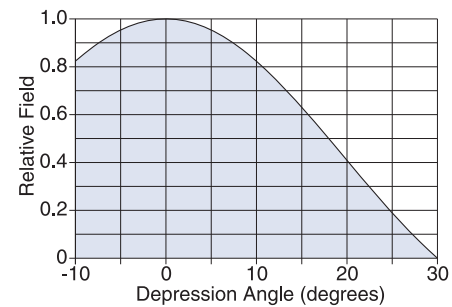
*Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. Contact KBU for further details.



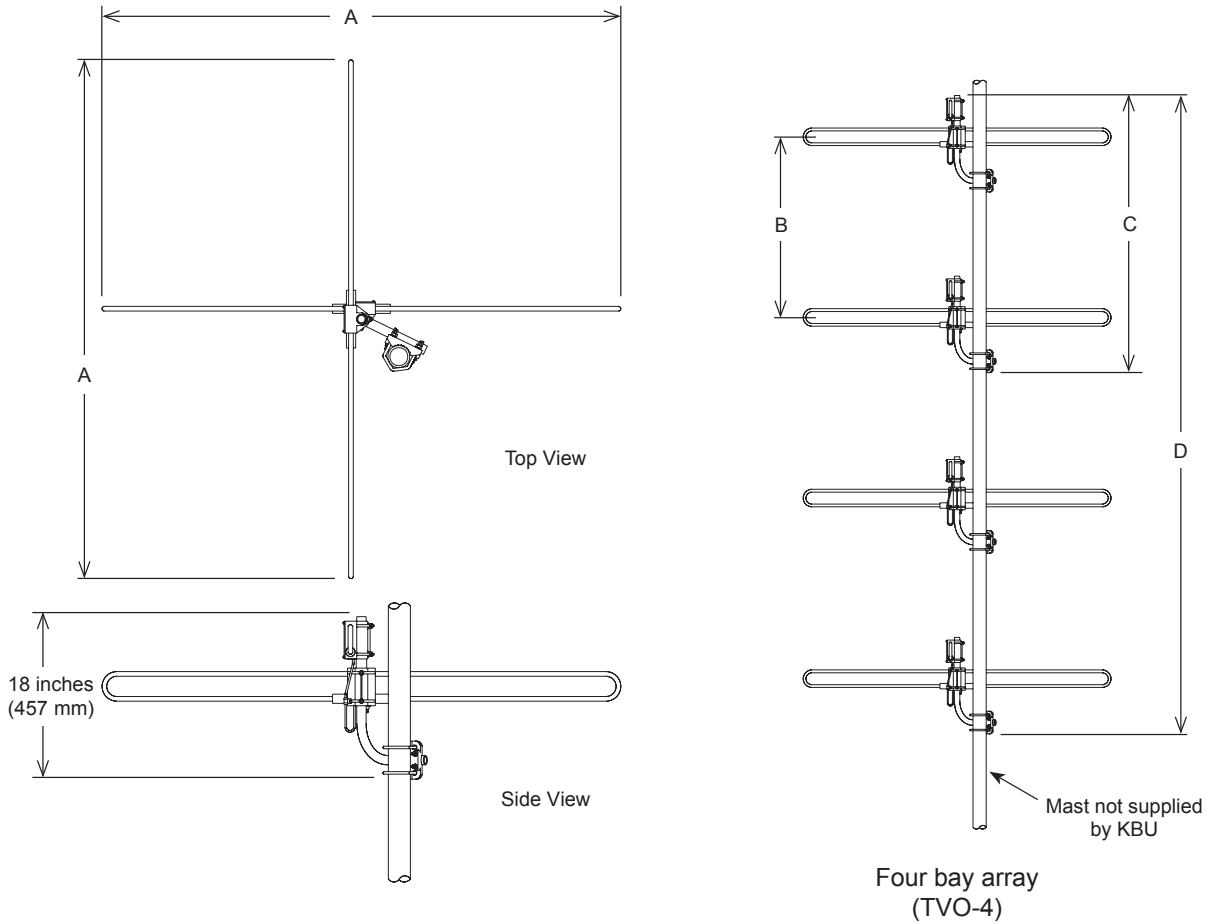
Azimuth pattern



Elevation pattern (two bays)



Elevation pattern (four bays)



Dimensions

Frequency range	A	B	C	D
54—60 MHz	96 inches (2439 mm)	104 inches (2642 mm)	122 inches (3099 mm)	330 inches (8382 mm)
60—66 MHz	87.5 inches (2223 mm)	94 inches (2388 mm)	112 inches (2845 mm)	300 inches (7620 mm)
66—72 MHz	79.5 inches (2020 mm)	86 inches (2184 mm)	104 inches (2642 mm)	276 inches (7010 mm)
76—82 MHz	69.5 inches (1766 mm)	75 inches (1905 mm)	93 inches (2363 mm)	243 inches (6172 mm)
82—88 MHz	65 inches (1651 mm)	69 inches (1753 mm)	87 inches (2210 mm)	225 inches (5715 mm)
174—180 MHz	31 inches (788 mm)	33 inches (838 mm)	51 inches (1296 mm)	117 inches (2972 mm)
180—186 MHz	30 inches (762 mm)	32 inches (813 mm)	50 inches (1270 mm)	114 inches (2896 mm)
186—192 MHz	29 inches (737 mm)	31 inches (787 mm)	49 inches (1245 mm)	111 inches (2819 mm)
192—198 MHz	28 inches (712 mm)	30 inches (762 mm)	48 inches (1220 mm)	108 inches (2743 mm)
198—204 MHz	27.5 inches (699 mm)	29 inches (737 mm)	47 inches (1194 mm)	105 inches (2667 mm)
204—210 MHz	26.5 inches (674 mm)	29 inches (737 mm)	47 inches (1194 mm)	105 inches (2667 mm)
210—216 MHz	26 inches (661 mm)	28 inches (711 mm)	46 inches (1169 mm)	102 inches (2591 mm)

30068 subject to alteration