

Omnidirectional Antenna
54 to 216 MHz (Channels 2–13)

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

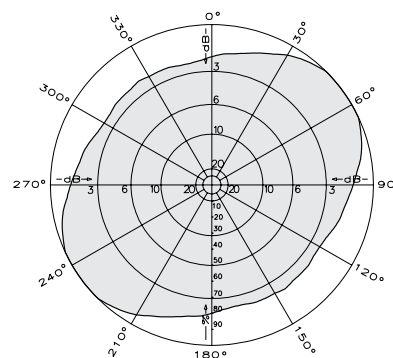
Like all Kathrein Scala Division antennas, the TVO is made of the finest materials using state of the art electrical and mechanical designs resulting in superior performance and long service life.

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

Specifications:

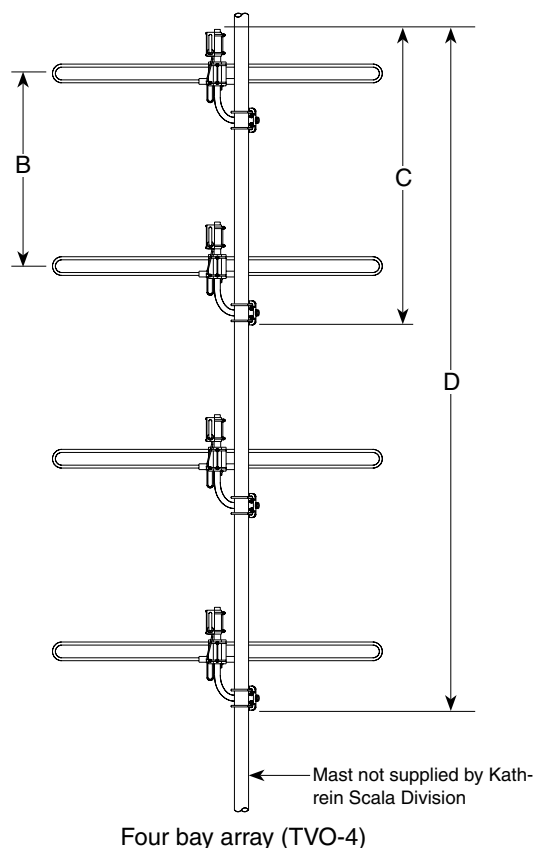
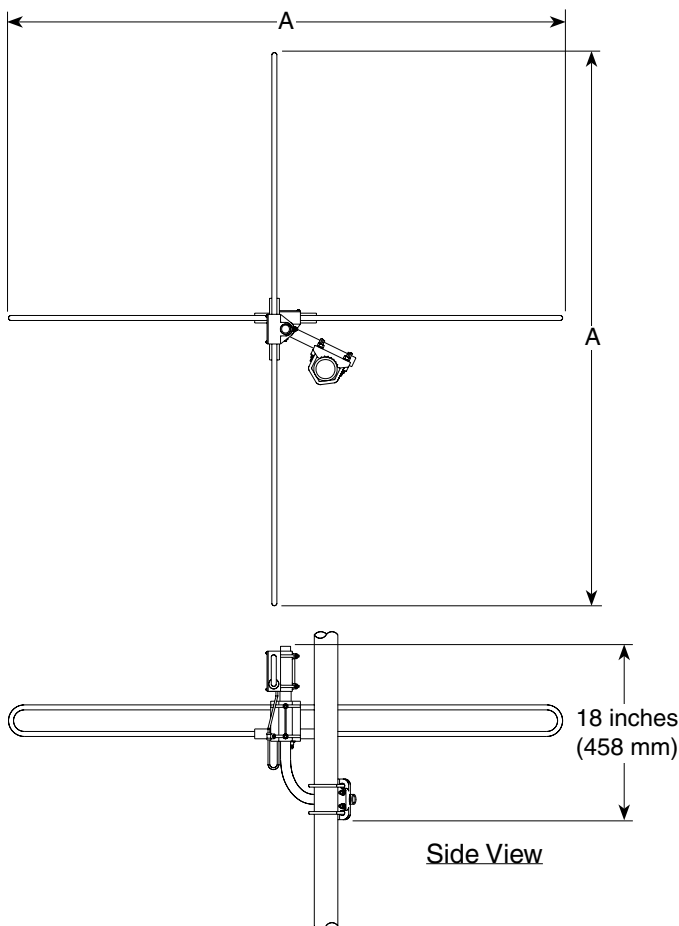
Frequency range	Any specified VHF-TV channel 54 to 216 MHz		
Gain	Gain	Power gain	
	TVO (one bay)	-3 dBd	0.5
	TVO-2 (two bays)	0 dBd ($\frac{1}{2}$ spacing)	1
	TVO-4 (four bays)	3 dBd ($\frac{1}{2}$ spacing)	2
Impedance	50 or 75 ohms		
VSWR	<1.3:1		
Polarization	Horizontal		
Input power (per bay)	50 Ω model	250 watts	
	75 Ω model	100 watts	
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 (458 mm)	
	TVO-2 (two bays)	See reverse	
	TVO-4 (four bays)	See reverse	
Wind load	at 100 mph (160 kph)		
Front	52 lbf (229 N) per bay maximum		
Wind survival rating*	120 mph (200 kph)		
Mounting	For masts of 2.375 inches (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. See the Engineering Section of the catalog for further details.



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Top View



Dimensions: Frequency range inches (mm)	A	B	Two bays C	Four bays D
54–60 MHz	96 (2439)	104 (2642)	122 (3099)	329 (8357)
60–66 MHz	87.5 (2223)	94 (2388)	112 (2845)	299 (7595)
66–72 MHz	79.5 (2020)	86 (2185)	104 (2642)	275 (6985)
76–82 MHz	69.5 (1766)	75 (1905)	93 (2363)	242 (6147)
82–88 MHz	65 (1651)	70 (1778)	88 (2236)	227 (5766)
174–180 MHz	31 (788)	33 (839)	51 (1296)	116 (2947)
180–186 MHz	30 (750)	32 (813)	50 (1270)	113 (2871)
186–192 MHz	29 (737)	31 (788)	49 (1245)	110 (2794)
192–198 MHz	28 (712)	30 (762)	48 (1220)	107 (2718)
198–204 MHz	27.5 (699)	29 (737)	47 (1194)	104 (2642)
204–210 MHz	26.5 (674)	28 (712)	46 (1169)	101 (2566)
210–216 MHz	26 (661)	28 (712)	46 (1169)	101 (2566)

Order Information:

Contact Kathrein Scala Division Customer Service for detailed order information.

All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.