

The Scala FMVMP dipole antenna for FM radio transmission offers high performance, easy installation, and application flexibility. Dipoles may be stacked for more gain and higher power handling capacity as required. Arrays include power dividers and coax feeders, plus installation hardware.

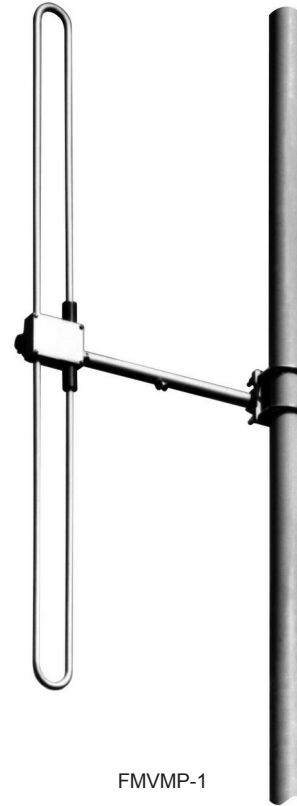
Like all Scala antennas, the FMVMP is made of the finest materials using state of the art electrical and mechanical designs, resulting in superior performance and long service life.

All FMVMP antennas feature:

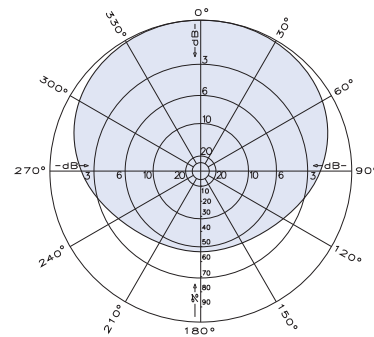
- Triple laminated dipole for superior strength.
- Anodized aluminum and stainless steel construction designed to survive extreme weather.
- Internal balun is sealed in a cast aluminum housing to prevent moisture ingress and ice damage.
- Entire antenna is at DC ground potential for superior resistance to lightning.

Specifications	
Frequency range	88—108 MHz
Gain	1 dBd
Power gain	1.26
Bandwidth	88—98 MHz, 93—103 MHz, 98—108 MHz
Impedance	50 ohms
VSWR	<1.5:1
Polarization	Vertical
Maximum input power	500 watts (at 50°C)
Connector	N female (other terminations are available for stacked arrays)
Wind load at 100 mph (160 kph)	
Front	25 lbf (111 N) maximum per bay
Wind survival rating*	120 mph (193kph)
Mounting	For masts of 2.375 inch (60 mm) OD (using supplied hardware)

\* 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.

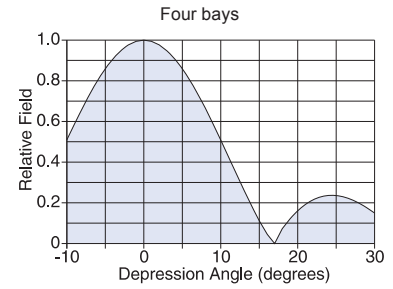
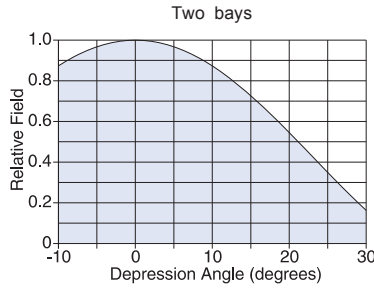
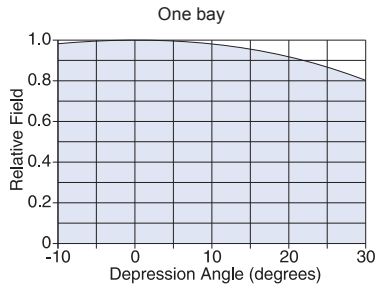


FMVMP-1



Azimuth pattern

### Elevation patterns



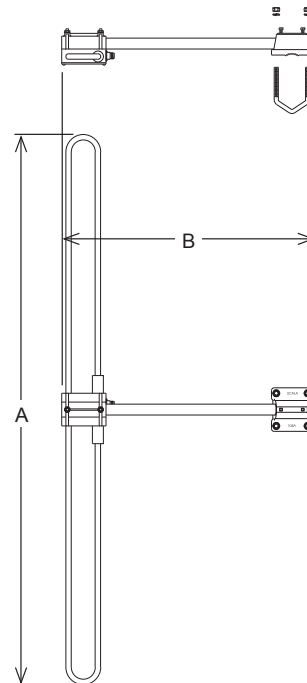
### Specifications

Model	Frequency MHz	Gain dBd	Weight lb (kg)	Power Gain	Equivalent Dimensions	Number of Antennas
FMVMP-1	88—98	1	6 (2.7)	1.26	56 x 33 inches (1422 x 838 mm)	1
	93—103	1	6 (2.7)	1.26	53 x 31.5 inches (1346 x 800 mm)	1
	98—108	1	6 (2.7)	1.26	51 x 30 inches (1295 x 762 mm)	1
FMVMP-2	88—98	3.5	23 (10.5)	2.24	166 x 33 inches (4216 x 838 mm)	2
	93—103	3.5	23 (10.5)	2.24	158 x 31.5 inches (4013 x 800 mm)	2
	98—108	3.5	23 (10.5)	2.24	151 x 30 inches (3835 x 762 mm)	2
FMVMP-3	88—98	4.9	34 (15.5)	3.09	276 x 33 inches (7010 x 838 mm)	3
	93—103	4.9	34 (15.5)	3.09	263 x 31.5 inches (6680 x 800 mm)	3
	98—108	4.9	34 (15.5)	3.09	251 x 30 inches (6375 x 762 mm)	3
FMVMP-4	88—98	6	48 (21.8)	3.98	386 x 33 inches (9804 x 838 mm)	4
	93—103	6	48 (21.8)	3.98	368 x 31.5 inches (9347 x 800 mm)	4
	98—108	6	48 (21.8)	3.98	351 x 30 inches (8915 x 762 mm)	4

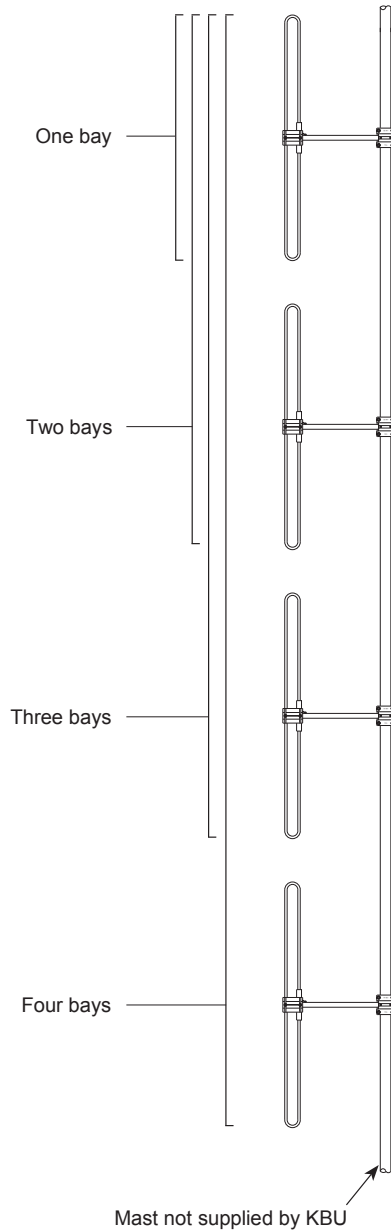
### Installation note:

In order to obtain proper impedance matching (minimum VSWR) and radiation patterns as shown the FMVMP antennas must be attached to a 2.375 inch (60 mm) OD mast that extends at least 12 inches (305 mm) above and below the antenna dipoles.

Dimensions	A	B
FMVMP 88—98 MHz	56 inches (1422 mm)	33 inches (838 mm)
93—103 MHz	53 inches (1346 mm)	31.5 inches (800 mm)
98—108 MHz	51 inches (1295 mm)	30 inches (762 mm)



30057b subject to alteration



**Order Information**

Model	Description
FMVMP	88—98 MHz antenna
FMVMP	93—103 MHz antenna
FMVMP	98—108 MHz antenna

30057b subject to alteration

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