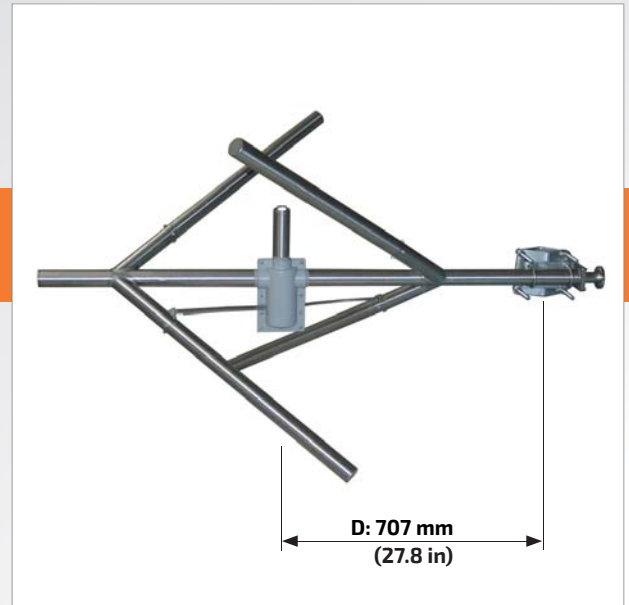


FMC-01

FM TOP OR SIDEMOUNT DIPOLE

FEATURES

- circular/elliptical polarization
- broadband 87.5 ÷ 104 MHz
92 ÷ 108 MHz



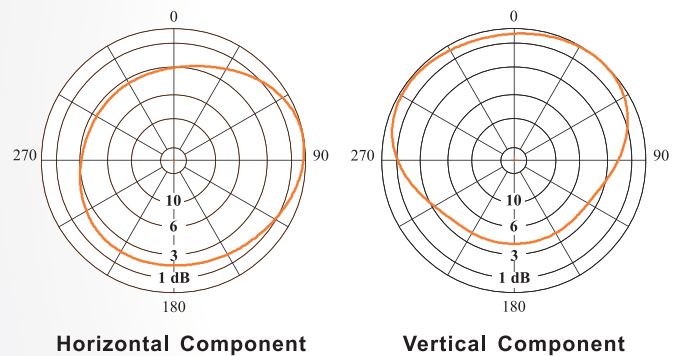
ELECTRICAL DATA

ANTENNA TYPE	FMC-01	
FREQUENCY RANGE	87.5 ÷ 104 MHz	92 ÷ 108 MHz
IMPEDANCE	50 ohm	
CONNECTOR	7/8" EIA	
MAX POWER	1.5 kW	
VSWR	≤ 1.5	
POLARIZATION	Circular/Elliptical	
GAIN (referred to half wave dipole)	-1.5 dB	
HALF POWER BEAMWIDTH	Omnidirectional ± 1.5 dB in free space Omnidirectional ± 2 dB with ø 100 pole	
LIGHTNING PROTECTION	All metal parts DC grounded	

MECHANICAL DATA

DIMENSIONS mm (in)	1447 x 801 x 801 (56.97 x 31.54 x 31.54)	1447 x 767 x 767 (56.97 x 30.2 x 30.2)
WEIGHT kg (lb)	12.5 (27.5)	
WIND SURFACE m ² (ft ²)	0.18 (1.94) front	0.26 (2.8) side
WIND LOAD kN (lbf)	0.22 (49.4) front	0.31 (69.7) side
at 160 km/h (100 mph)		
MAX WIND VELOCITY km/h (mph)	220 (136.7)	
MATERIALS	brass, aluminium, stainless steel, hot dip galvanized steel (bracket) teflon, fiberglass (radome)	
ICING PROTECTION	Feed point radome	
RADOME COLOUR	Grey (standard)	
MOUNTING mm (in)	With special pipe clamps ø 60 ÷ 114 (2.36 ÷ 4.5)	

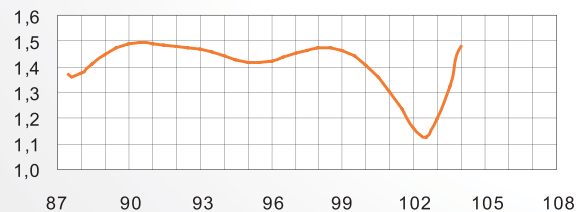
RADIATION PATTERNS (Mid Band)



Horizontal Component

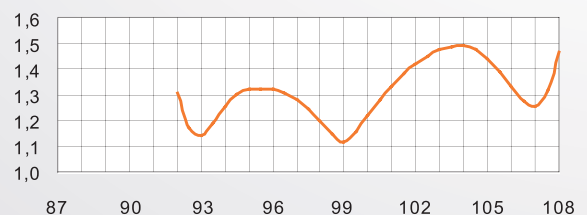
Vertical Component

VSWR



FREQ. (MHz)

VSWR



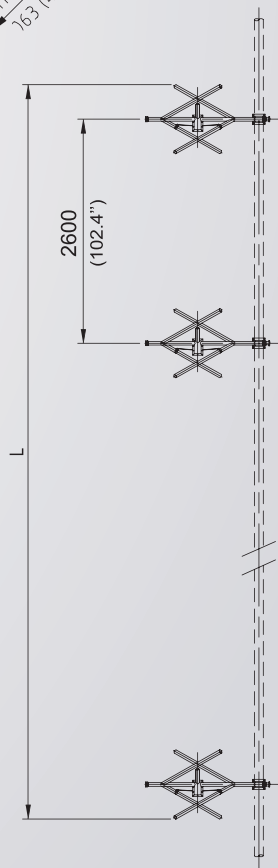
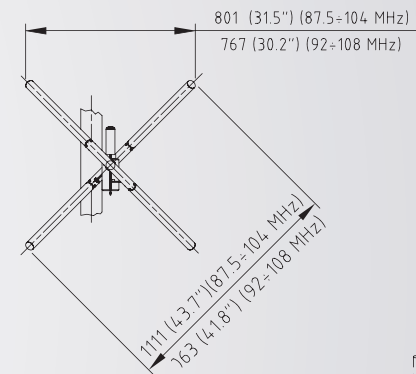
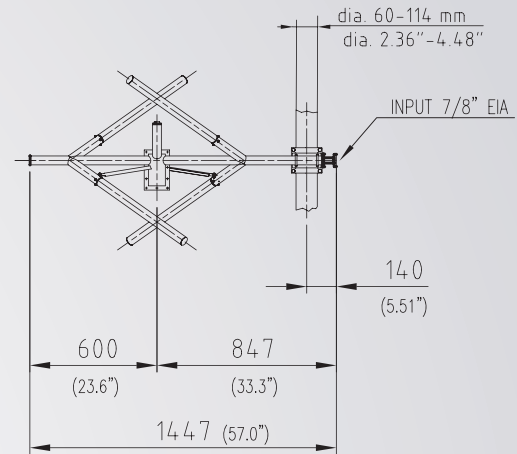
FREQ. (MHz)

FMC-01

FM TOP OR SIDEMOUNT DIPOLE

FEATURES

- radiating systems with FMC-01 dipole
- omnidirectional patterns



ELECTRICAL DATA

FREQUENCY RANGE	87.5 ± 108 MHz
IMPEDANCE	50 ohm
CONNECTOR	EIA flange according to system power rating
POWER RATING	The antenna system can accept any power according to requirements
VSWR (in the operating frequency)	≤ 1.35 without fine matcher ≤ 1.25 with one fine matcher ≤ 1.1 with two fine matchers
POLARIZATION	Circular/Elliptical
GAIN	Refer to table
VERTICAL PATTERN	Null fill, beam tilt and special requirements to order
OTHER FEATURES	The antenna system can be supplied in split feed configuration (two equal halves). Each half can accept full power.

MECHANICAL DATA

HEIGHT OF ARRAY	Subject to number of bays
TOTAL NET WEIGHT	Refer to table
WIND LOAD	Refer to table
PRESSURIZABLE	Yes
RADOME COLOUR	Grey (standard)
MOUNTING HARDWARE	One clamp for pole, supplied

TECHNICAL DATA

NUMBER OF BAYS	PANELS PER BAY	GAIN dB (1)	GAIN TIMES (1)	WEIGHT (2) kg (lb)	ANTENNA HEIGHT L m (ft)	WIND LOAD (3) kN (lbf)
2	1	1.5	1.41	36 (79)	3.4 (11.1)	0.63 (142)
4	1	4.5	2.82	70 (154)	8.6 (28.2)	1.27 (285)
6	1	6.2	4.17	107 (236)	13.8 (45.3)	1.91 (429)
8	1	7.5	5.62	146 (322)	19.0 (62.3)	2.54 (571)
12	1	9.2	8.32	236 (520)	29.4 (96.5)	3.82 (859)

(1) referred to half wave dipole. Losses of power distribution network not included.
 (2) without mounting hardware, for FMC-01 dipole
 (3) v = 160 km/h (100 mph)

All dimensions are in millimeters (inches)