



## MODEL 160FM

### FEATURES

The 160FM series of antenna is designed for use in medium to high power FM broadcast transmitter systems.

Wide bandwidth and high power handling ability make it suitable for use in multicoupled transmitter systems.

### CONSTRUCTION

The 160FM series of antenna are manufactured using stainless steel tubing with all elements removable to minimize shipping dimensions

Stainless steel hardware is used throughout with a galvanized mounting bracket supplied for attachment to 50mm vertical or horizontal member.

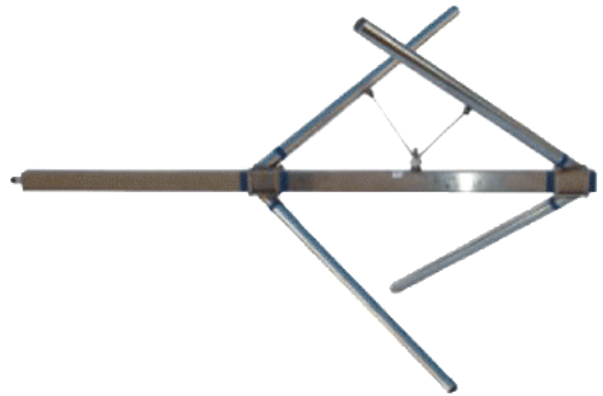
### NOTES

Power dividers are available for 2,3,4 bay or greater arrays with input power ratings of 500-2000 watts.

All elements are DC coupled to the mast for maximum lightning protection.

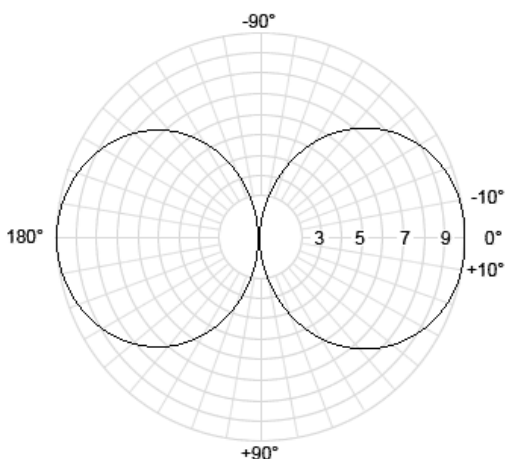
De-icers and feedpoint radomes are available for snow and ice conditions.

Available in other VHF and UHF frequencies.

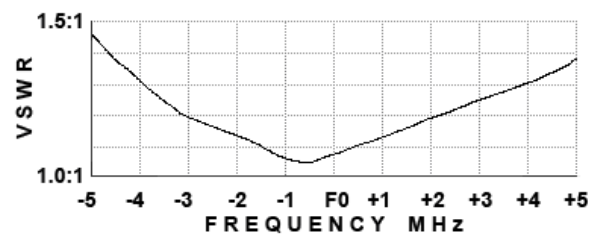


<b>MODEL NO</b>	<b>160FM</b>
<b>FREQUENCY RANGE</b>	87.5 - 108 MHz
<b>IMPEDANCE</b>	50 ohms
<b>BANDWIDTH</b>	7 MHz
<b>VSWR</b>	< 1.3:1
<b>GAIN</b>	-3dBd (gain dipole)
<b>GAIN</b>	UNITY (gain circular)
<b>BEAMWIDTH E</b>	98°
<b>BEAMWIDTH H</b>	BASICALLY OMNI
<b>POWER</b>	500 Watts (input)
<b>LIGHTNING</b>	DC GROUND
<b>TERMINATION</b>	'N' FEMALE
<b>WEIGHT</b>	10kg
<b>DIPOLAS/ELEMENTS</b>	1
<b>BOOM Ø</b>	50mm
<b>BOOM LENGTH</b>	1500 mm
<b>MOUNTING (POSITION)</b>	END
<b>PROJECTED AREA</b>	0.13 m <sup>2</sup>
<b>LATERAL THRUST *</b>	0.220 kN (@ 175 km/h)

\* In accordance with AS 1170 : Part 2 "SAA Loading Code - Wind Forces"



E plane radiation pattern



Typical VSWR Plot



## POLAR ELECTRONIC INDUSTRIES PTY LTD

COMMUNICATIONS ENGINEERS

ACN : 005 545 291 ABN : 74 711 768 638

9 - 15 FRIARS RD MOORABBIN 3189 VICTORIA AUSTRALIA

T : + 61 3 9555 2500 F : + 61 3 9555 1515 TF : 1800 33 5633 (Australia only)

E : polar@polarelec.com.au W : http://www.polarelec.com.au

