



Versatile Antenna for Band II VHF FM

- **Wide band, 88 MHz–108 MHz**
- **No tuning adjustments**
- **Superior VSWR to 1.1:1**
- **Highest power levels**
- **Vertical, horizontal, or circular polarization**
- **Flexible configuration allows virtually any radiation pattern**
- **Easy installation**
- **High corrosion resistance**
- **Modular construction**

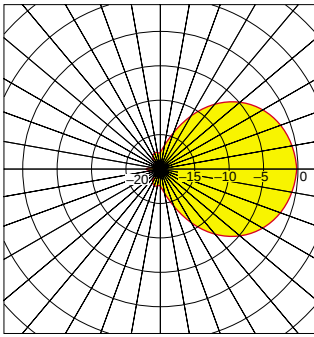
The advanced features of the TCI Model 711 dual-dipole panel antenna series for the FM Band provide outstanding performance, ease of installation, and improved corrosion resistance not found in older designs. Construction entirely of aluminum alloy results in a conductivity five times greater than stainless steel.

All-aluminum alloy construction also provides corrosion resistance superior to designs featuring dissimilar metals such as stainless steel, galvanized steel, and copper, which encourage corrosion. Lighter weight is another advantage: TCI antennas weigh about half as much as older designs using galvanized steel, allowing less costly mounting masts or towers and making installation easier.

Superior VSWR (typically 1.07:1 or better) and exceptional power handling up to 25 kW, and more as required, distinguish this antenna.

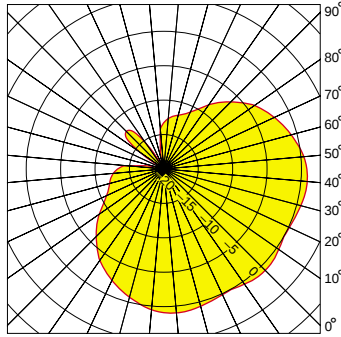
The versatile Model 711 design allows for vertical, horizontal, or circular polarization. The 2-dipole modules allow great flexibility in configuration, permitting virtually any desired radiation pattern.

1 Panel



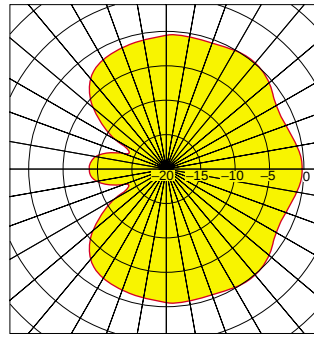
Max Gain: 13.1 dB (20.4)

2 Panels



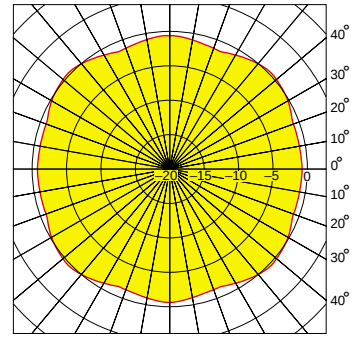
Max Gain: 10.4 dB (11.0)

3 Panels



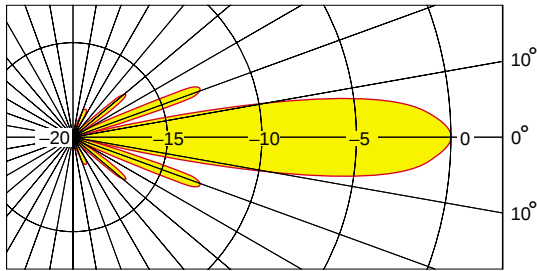
Max Gain: 8.8 dB (7.6)

4 Panels

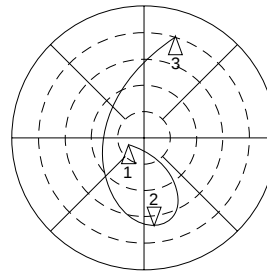


Max Gain: 8.1 dB (6.5)

Typical Gain Patterns for a Vertically Polarized 8-Bay System (Gain relative to a half-wave dipole)



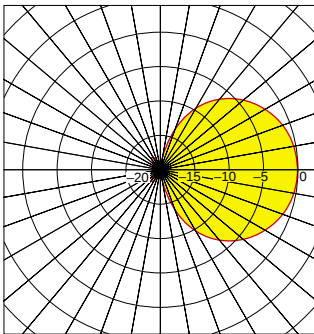
Typical elevation radiation pattern, 4-bays



VSWR Plot, 1.1:1 Maximum

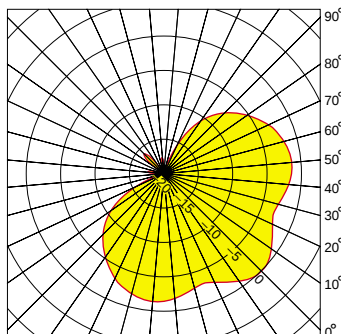
1. 88 MHz, VSWR 1.01:1
2. 98 MHz, VSWR 1.05:1
3. 108 MHz, VSWR 1.08:1

1 Panel



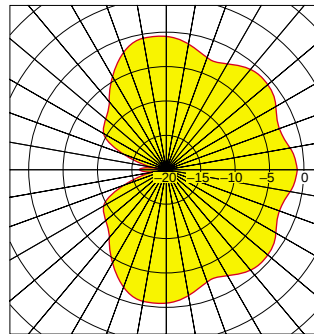
Max Gain: 13.7 dB (23.4)

2 Panels



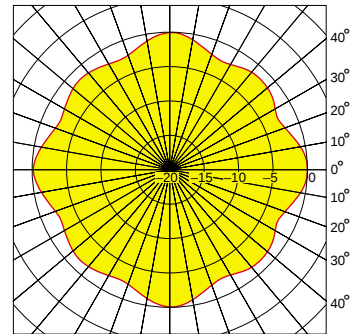
Max Gain: 11.7 dB (14.7)

3 Panels



Max Gain: 9.6 dB (9.1)

4 Panels



Max Gain: 8.3 dB (6.7)

Typical Gain Patterns for a Horizontally Polarized 4-Bay System (Gain relative to a half-wave dipole)

Polarization	Dimensions (mm)	Weight (kg)	Wind Load* (kg)
Vertical	2200w x 3000h	47.1	180
Horizontal	2200w x 3000h	66.5	257
Circular	2900w x 5100h	110.1	511

* 160 kph wind

Nominal Physical Characteristics

(Design characteristics are adjusted to suit specific mast type and dimensions.)

Subject to change without notice.

711-1-499