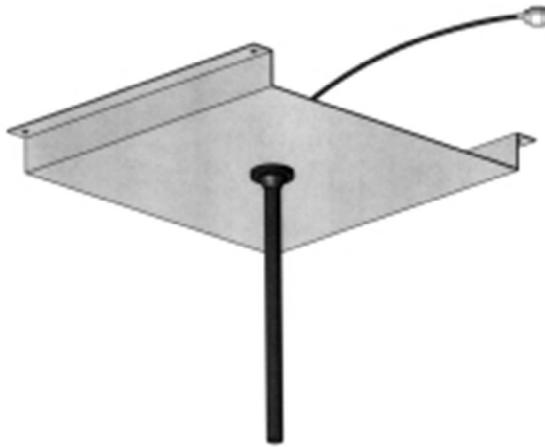


## F-3741 Tri-Band Antenna

Unity Gain

VHF, UHF, 764-960

- The F-3741 Tri-Band antenna is designed to provide simultaneous coverage in the 150, 450, and 700, 800 or 900 bands.
- A common application is to provide coverage in enclosed areas such as tunnels, subway stations, mines, etc.
- The antenna employs a vertical radiating structure housed in a flame retardant polycarbonate radome.
- **This antenna has been designed for mounting on a concrete surface. This antenna must be mounted on a concrete surface in order to meet full bandwidth specifications.**



- Supplied with pigtail and N-Male connector.
- 14" x 14" Ground Plane mounting bracket included with antenna

**\* Operating Frequencies or frequency ranges must be specified when ordering.**

### Electrical Specifications

F-3741

Frequency Bands:	150/450/700,800,900
Nominal Gain:	0 dB
Bandwidth @ 2.0:1 VSWR*	
138-174 MHz	8
406-470 MHz or 450-512 MHz	64
764-890 MHz or 806-960 MHz	126
Polarization	Vertical
Pattern	Omnidirectional
Power Rating, Watts (Total)	50
Nominal Impedance, Ohms	50
Radome	Polycarbonate
Color	Black
Lightning Protection	DC Ground
Standard Termination	N Male

### Mechanical Specifications

F-3741

Length, inches (mm)	11.25 (286.88)
Diameter, Inches (mm)	0.65 (16.575)
Min. Ground Plane Size, inches (mm)	14" x 14"



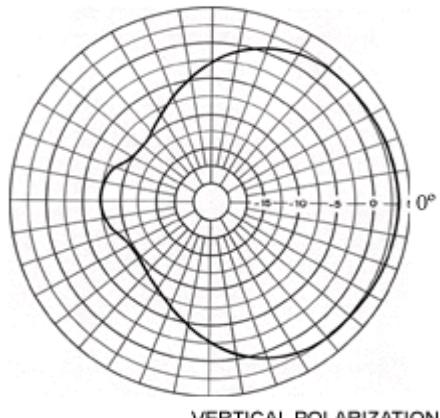


- Rugged two-element low gain yagi antenna with wide unidirectional characteristic.
- Cardioid pattern offering some coverage to the rear of the antenna if needed.
- Rugged design to withstand harsh environmental conditions.
- Mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.

#### **Electrical Specifications**

**291-70**

**HORIZONTAL PATTERN**



**VERTICAL POLARIZATION**

Frequency Range: 138-174 MHz

Nominal Gain: 3.5 dBd

Front-to-back ratio 15 dB

Horizontal Beamwidth: (Ver Pol) 140°

Vertical Beamwidth: (Ver. Pol.) 70°

Bandwidth: 1.5:1 VSWR 3.75% of frequency

Polarization: Vertical or Horizontal

Pattern: Directional

Power Rating: 350 Watts

Nominal Impedance: 50 Ohms

Lightning Protection: DC Ground

Standard Termination: Type « N » Male

#### **Mechanical Specifications:**

**291-70**

Length: (at 138 MHz) 54" (1372mm)

Width: 43.6" (1107mm)

Weight: 4.0 lbs. (1.8kg)

Rated Wind Velocity: No ice 150 mph (241km/h)

Rated Wind Velocity with 0.5" (13mm) of ice 140 mph (225km/h)

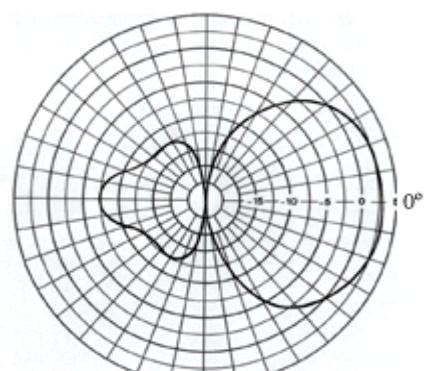
Lateral Thrust at 100 mph wind: 47 lbs. (21kg)

Bending Moment: (100 mph) 113 ft/lbs. (15.6kg/m)

Equiv. Flat Plate Area: 1.0 ft<sup>2</sup> (0.093m<sup>2</sup>)

Mounting Hardware: 115-85 Clamp set

**HORIZONTAL PATTERN**



**HORIZONTAL POLARIZATION**