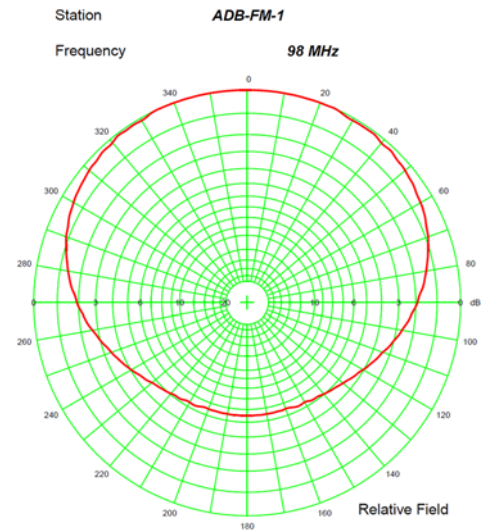


# ADB-FM1



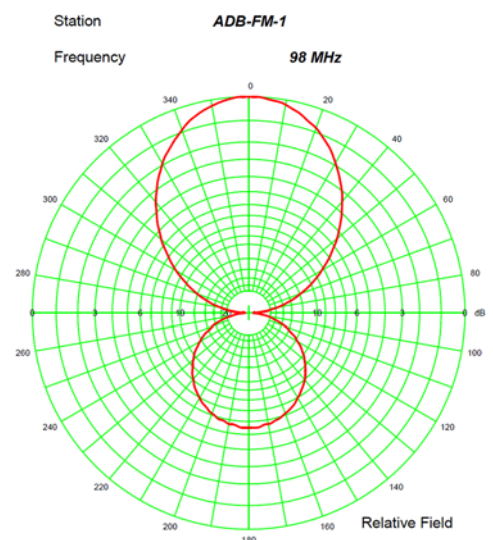
The ADB-FM1 Vertically Polarized Broadband FM Dipole Antenna provides a simple solution. The design focuses on low-power FM radio stations requiring up to 1 kW input. It supports **2, 4, 6, or 8 antenna bays** or tiers. These options will deliver a gain of **5, 8, 9.8 or 11 dB**, respectively. The antenna is light and straight forward to erect.

The vertical and horizontal patterns are shown below, along with an image of a single element. Please note the antenna elements construction is Aluminum. Each element includes protection with **Alodine\*\***, which is a military-grade coating. It protects against corrosion, significantly extends the product lifetime and, more importantly, guards against degraded antenna performance.



HRP Max/Mean Gain **1.6 power ratio** , & **2 dB**

**Azimuth Cut**



HRP Max/Mean Gain **3.5 power ratio** , & **5.5 dB**

**Elevation Cut**

## GENERAL SPECIFICATIONS

Frequency Band:	87.5 - 108 MHz
Antenna Gain:	2 dBd @ 98MHz
Polarisation:	Vertical
Impedance:	50 Ω
Input Connector	7-16 DIN Female (Opt. N, EIA 7/8")
Maximum Power Rating	1.5 kW
VSWR:	≤ 1.4:1
Half Power Beam Width	H Plane 180°   V Plane 76°
Materials:	Aluminium (Alocrom Protected)
System Weight for 2, 4, 6,& 8 bays.	12, 19, 30 & 50 Kgs
Dimensions	1395 x 880 x 50 mm

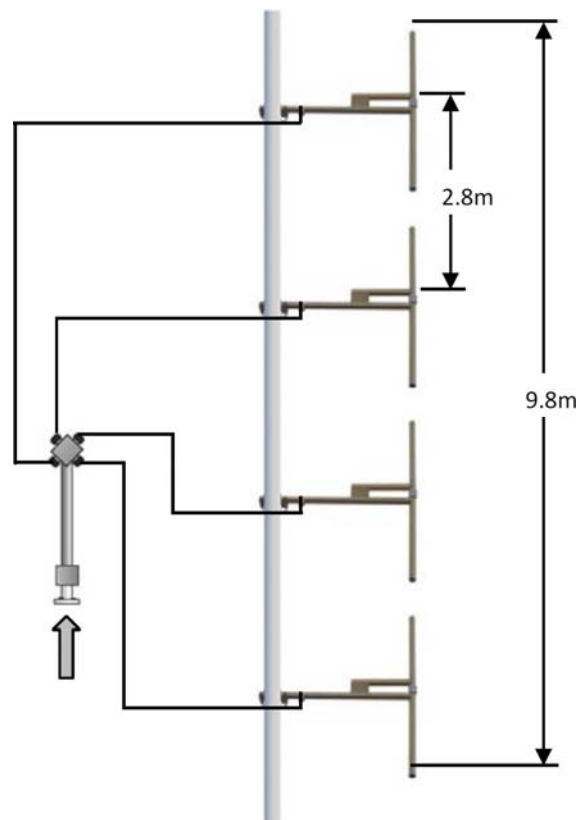
- Specifications are typical and subject to change without notice.
- \*\* Alodine is a chromate conversion coating chemically applied to Aluminium that provides corrosion protection. Its use assists electrical conductivity, as in this case.

# of Bays	Gain (dB)	System Height (m)	System Weight (Kg) <sup>1</sup>
2	5.0 PK or 3.53 RMS	4.2	12
4	8.0 PK or 5.65 RMS	9.8	19
6	9.8 PK or 6.93 RMS	15.4	30
8	11.00 PK or 7.78 RMS	21.0	50

(1- without mounting hardware)

## Mounting Instructions

- The suggested diameter of the mounting pole is between 60 and 110 mm.
- Should the dipoles be mounted close to a large tower or metal structure, then the radiation lobe may be altered and the VSWR may be effected.
- The height of a single dipole is 1.4m
- The suggested distance between the dipoles for a broadband system at mid band is 2.8m with the overall length of a 4 bay system at 9.8m.



# ADB-FM1

Dipole designed to minimize shipping weights & dimensions.

Dipole arms are removed for shipping.

