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The Aareff 4TMA-WB is a professional-grade, 4-bay stacked circularly polarized FM broadcast antenna system. Designed for true omnidirectional 360° coverage, this array utilizes a classic "Cycloid" dipole design to deliver optimal penetration and multi-path rejection for FM broadcasters. Shipped complete with all mounting hardware, splitter boxes, and a pre-cut 0.5 WL phasing harness.

### ELECTRICAL SPECIFICATIONS

Frequency Range	87.5 to 108 MHz (Factory Tuned)
Gain (Per Polarization Plane)*	1.7 dBd (3.8 dBi)
Power Gain (Multiplier per Plane)	1.47
Total Radiated Gain	4.7 dBd (6.8 dBi)
Polarization	Circular (Right-Hand)
Maximum Input Power	800W (N-Type) / 3000W (DIN 7-16)
VSWR	< 1.5:1 (across 2.8 MHz bandwidth)
Input Impedance	50 Ohms (Unbalanced)
Vertical Beamwidth	15 Degrees
Array Spacing	0.5 Wavelength ( $\lambda/2$ )

\*Note: Gain figures derived from 3D electromagnetic modeling based on half-wave spacing, factoring for mutual coupling and circular power split.

### MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Total System Weight (4 Bays + Cables)	12 kg (26.5 lbs)
Weight (Per Individual Bay)	3 kg (6.6 lbs)

<b>Total System Wind Area (EPA)</b>	<b>0.6 m<sup>2</sup> (6.5 sq ft)</b>
<b>EPA (Per Individual Bay)</b>	0.14 m <sup>2</sup> (1.5 sq ft)
<b>Total System Wind Load (@ 100 mph)</b>	<b>740 N (166 lbs)</b>
<b>Wind Load (@ 100 mph, Per Individual Bay)</b>	170 N (38 lbs)
<b>Dimensions (Per Individual Bay)</b>	1.5m x 0.9m x 0.5m
<b>Materials</b>	1" Aluminum Square/Round Tube, Teflon, Resin, Stainless Steel
<b>Input Connectors</b>	N Female or DIN 7-16

## SYSTEM INCLUDES

- (4) Cycloid Main Dipoles
- (4) Vertical Radiators
- (4) Boom Extensions & Tuning Arms
- (3) RF Splitter Boxes
- (1) Complete Phasing Cable Kit
- (1) Stainless Steel Mounting Kit

## FIELD TUNING GUIDE

Frequency	Tuning Arm (L)
88 MHz	LO (44 cm)
93 MHz	LO (39 cm)
98 MHz	LO / HI (34 / 33 cm)
103 MHz	HI (29 cm)
108 MHz	HI (25 cm)