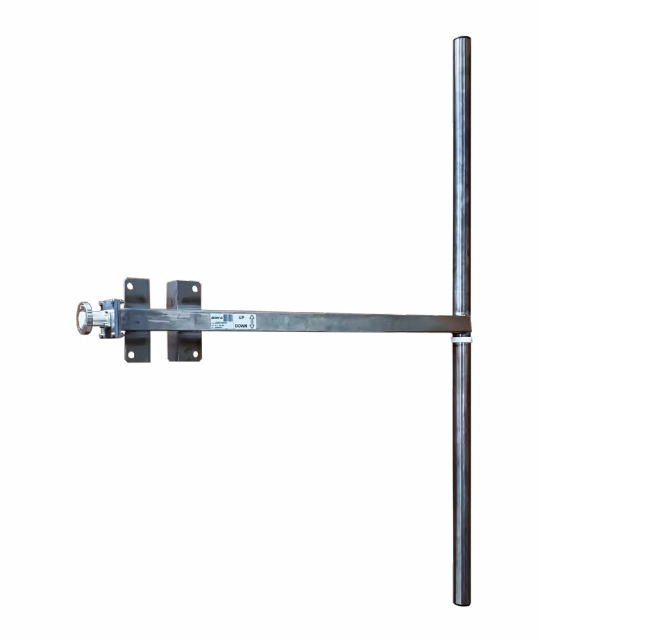
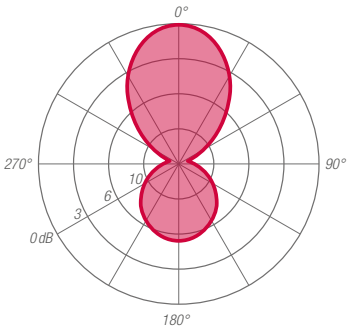


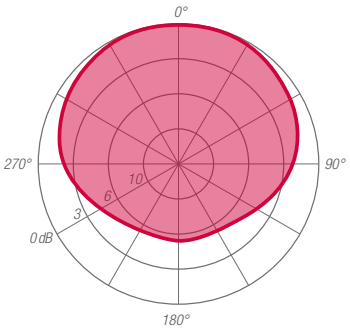
## ANTENNA FEATURES

- Dipole antenna.
- Vertical polarization.
- Broadband 87.5÷108 MHz.
- Omnidirectional radiation pattern.
- Stainless steel version.

## RADIATION PATTERNS (Mid Band)

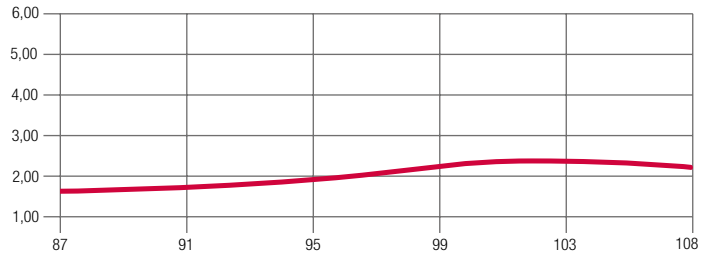



E - Plane

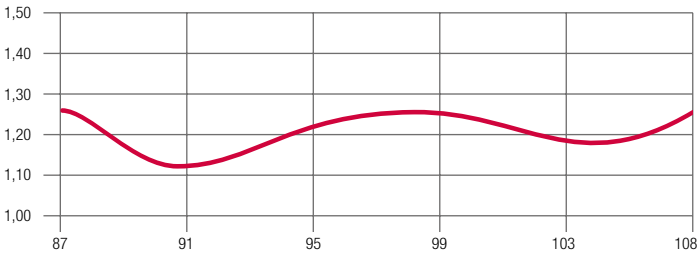



H - Plane

### GAIN (dB)




### VSWR

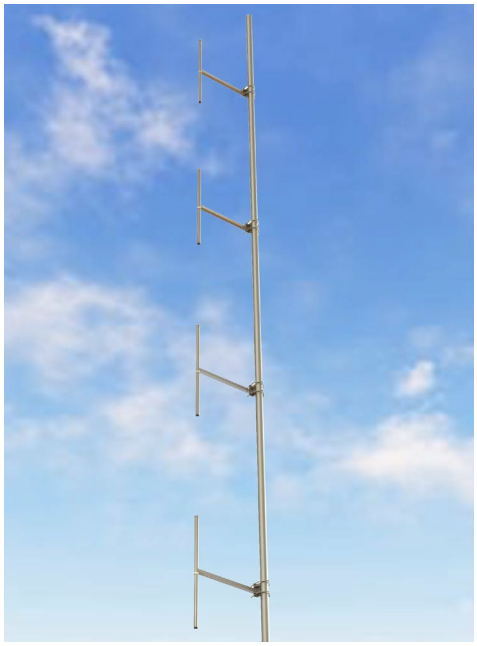



## ELECTRICAL DATA

| | |
|---|---|
| *WORKING BAND:* | 87.5 - 108 MHz |
| *BANDWIDTH:* | VHF band FM |
| *GAIN:* | 2.07 dBd (4.27 dBi) |
| *VSWR:* | ≤ 1.27:1 (-18.5 dB) |
| *POLARIZATION:* | Vertical |
| *IMPEDANCE:* | 50 Ohm unbalanced |
| *HALF POWER BEAMWIDTH:* | E-Plane - 70°<br>H-Plane - 222° |
| *LIGHTNING PROTECTION:* | All metal parts DC grounded including inner conductors |
| *AVAILABLE VERSION AND CODE:* | ADE0102230 - N - max 800W rms<br>ADE0102231 - DIN 7/16 female - max 3000W rms<br>ADE0102232 - EIA 7/8" - max 5000W rms<br>ADE0102232A - EIA 7/8" 90° UP/DOWN - 5000W rms |

## MECHANICAL DATA

| | |
|---|---|
| *MATERIALS:* | Stainless steel body<br>Aluminum internal lines |
| *MOUNTING:* | Directly on supporting structure |
| *MOUNTING BRACKETS:* | Included for Ø60÷114mm pipe (Ø 2.36" - 4+1/2") |
| *ICING PROTECTION:* | Optional feed point radome (Code XRADEI) |
| *TREATMENTS:* | Silver plated connector |
| *PRESSURIZATION:* | Optional |
| *ANTENNA DIMENSIONS:* | 1350x910x40 mm (53.1x35.8x1.57 in) |
| *ANTENNA WEIGHT:* | 7 kg (15.4 lb) |
| *WIND SURFACE:* | 0.06m² (0.64ft²) front - 0.09m² (0.96 ft²) side |
| *WIND LOAD (160 km/h and 30°C)* | 0.04 kN front - 0.07 kN side |
| *SURVIVAL WIND:* | 220 km/h (136.7 mph) |
| *PACKING DIMENSIONS:* | Box 1400x1200x150mm - 12.4kg (55.1x47.2x5.9 in - 27.3lb) |



## ARRAY FEATURES

- Omnidirectional pattern
- Equal or unequal power distribution system
- Configurable for specific azimut and elevation pattern
- Suitable for multiplexing many channels

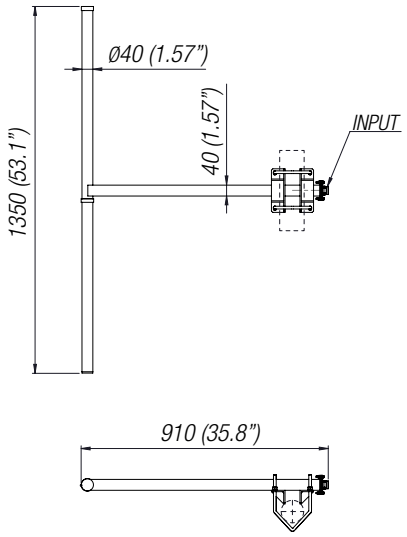
## ARRAY ELECTRICAL DATA

| | |
|---|---|
| *FREQUENCY RANGE* | 87.5 ÷ 108 MHz |
| *IMPEDANCE* | 50 ohm |
| *CONNECTOR* | EIA flange according to system power rating |
| *POWER RATING* | The antenna system can accept any power according to requirements |
| *VSWR* | ≤ 1.17 in the operating channels or<br>≤ 1.27 throughout the frequency range<br>Antenna system VSWR value also depending from the supporting structure |
| *POLARIZATION* | Vertical |
| *GAIN* | Refer to table |
| *HORIZONTAL PATTERN* | Omnidirectional |
| *VERTICAL PATTERN* | Null fill, beam tilt and special requirements to order |
| *OTHER FEATURES* | Antenna components and feed harnesses can be optimized for channels of interest. |

## ARRAY MECHANICAL DATA

| | |
|---|---|
| *HEIGHT OF ARRAY* | Subject to number of bays |
| *TOTAL NET WEIGHT* | Refer to table |
| *WIND LOAD* | Refer to table |
| *PRESSURIZABLE* | Optional |
| *MOUNTING HARDWARE* | Optional mounting for side mount configuration |

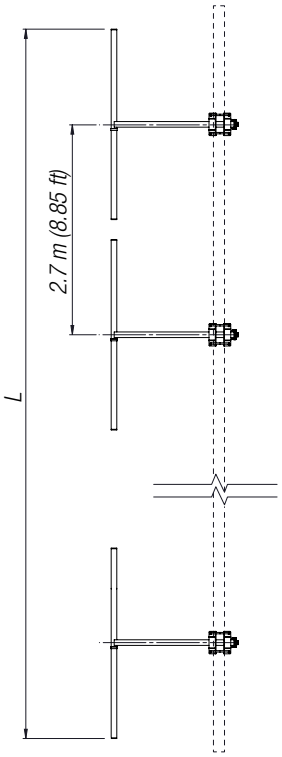
## ANTENNA DIMENSIONAL DETAILS




## ARRAY TECHNICAL DATA

| BAYS | PANELS PER BAY | GAIN(1) dB | GAIN TIMES(1) | WEIGHT(2) kg (lb) | ANTENNA HEIGHT(L) m (ft) | WIND LOAD(3) kN |
|---|---|---|---|---|---|---|
| 2 | 1 | 5.3 | 3.4 | 29.8 (65.7) | 4.1 (13.4) | 0.19 |
| 4 | 1 | 8.4 | 6.8 | 52.6 (115.9) | 9.5 (31.2) | 0.38 |
| 6 | 1 | 10.2 | 10.4 | 78.4 (172.8) | 14.4 (47.2) | 0.58 |
| 8 | 1 | 11.5 | 14.1 | 99.2 (218.7) | 19.6 (64.3) | 0.77 |
| 12 | 1 | 13.2 | 20.9 | 148.8 (328.0) | 30.0 (98.4) | 1.16 |

(1) Gain data is relative to half-wave dipole. Values given are nominal and assume standard harness configurations
Gain will vary depending in specific feed system, null fill and beam tilt.
(2) Without mounting hardware.
(3) 160 km/h (100 mph) wind and 30°C (86°F) air temperature.
(L) Total Antenna Height.




## OPTIONS & SERVICES

| | |
|---|---|
| *PATTERN DESIGN* | Custom azimuth and elevation (beam tilt and null fill) patterns can be designed to meet specific protection/coverage requirements |
| *PATTERN CERTIFICATION* | Proof-of-performance factory test and pattern measurements on ALDENA test plan area |
| *MOUNTING HARDWARE* | Turn-key antenna delivering<br>Tower top/side spine<br>Special hardware/brackets |
| *TRANSMISSION LINE* | Transmission line system design and layout |
| *COMBINERS/FILTERS* | Combiners/Filters to suit requirements can be supplied |
| *CALCULATION SERVICES* | Coverage/interferfence simulations<br>EM Near Field control and reduction (Environmental impact studies) |
| *ON-SITE SERVICES* | Site Survey and Inspection<br>Installation/commissioning and supervisioning<br>Drive test & EM Field strength measurements<br>After sales maintenance |
| *TRAINING* | Techical training certification and consultancy |

**Note:**
Total Antenna Height (L) is subject to change according to requirement.
Custom designed antennas meeting special requirements such as specific azimuthal pattern, different gains and custom power input are available upon request.

Specification are subject to change without notice