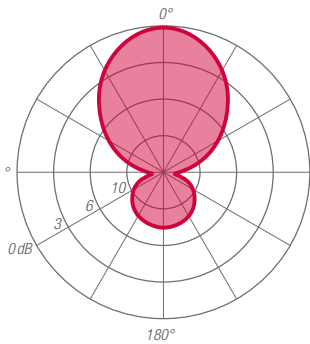




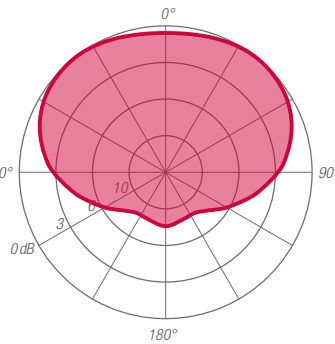
ANTENNA FEATURES

- Dipole antenna.
- Vertical polarization.
- Broadband 174÷230 MHz.
- Omnidirectional radiation pattern.
- Stainless steel or aluminium version.
- Analogue/Digital Service.

RADIATION PATTERNS (Mid Band)

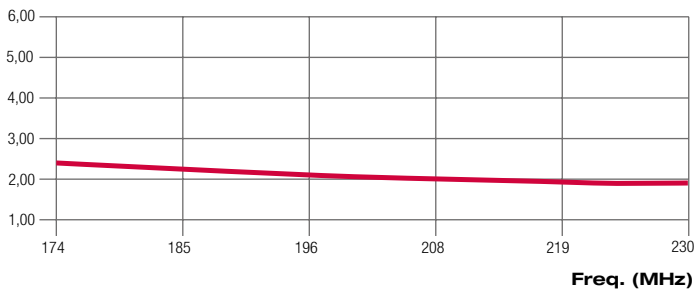


E - Plane

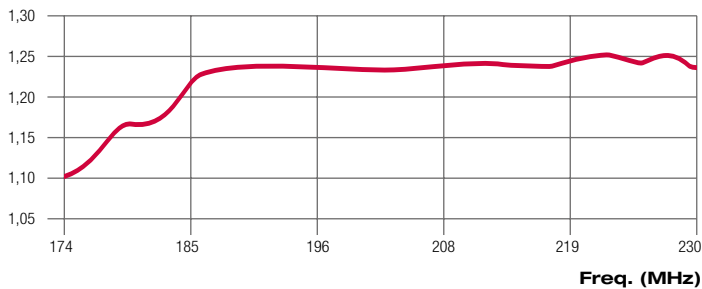


H - Plane

GAIN (dB)



VSWR



ELECTRICAL DATA

| | |
|-----------------------------|--|
| WORKING BAND: | 174 - 230 MHz |
| BANDWIDTH: | VHF band III |
| GAIN: | 2.2 dBd (4.5 dBi) |
| VSWR: | ≤ 1.25:1 (-19 dB) |
| POLARIZATION: | Vertical |
| IMPEDANCE: | 50 Ohm balanced |
| HALF POWER BEAMWIDTH: | E-Plane - 75° H-Plane - 203° |
| LIGHTNING PROTECTION: | All metal parts DC grounded including inner conductors |
| AVAILABLE VERSION AND CODE: | ADB0104211 - DIN 7/16 female - max 2000W rms ADB0104210 - EIA 7/8" - max 3500W rms ADB0104231 - DIN 7/16 female - max 2000W rms ADB0104230 - EIA 7/8" - max 3500W rms |

MECHANICAL DATA

| | |
|----------------------------------|---|
| MATERIALS: | Aluminium (version ADB010421X) Stainless steel (version ADB010423X) Hot dip galvanized steel bracket and bolts |
| MOUNTING: | Directly on supporting structure |
| MOUNTING BRACKETS: | Included for Ø40÷114mm pipe (Ø1 5/8" - 4") |
| ICING PROTECTION: | Antenna body covered by ABS radome |
| TREATMENTS: | Antenna body military norms treatment (MIL-C-5541 ver. ADB010421X) Military norms treatment (MIL-C-5541) internal lines Silver plated connector |
| PRESSURIZATION: | No |
| ANTENNA DIMENSIONS: | 670x535x160 mm (26.4x21.06x6.3 in) |
| ANTENNA WEIGHT: | 4.3 kg (9.5 lb) (version ADB010421X) 8.0 kg (17.63 lb) (version ADB010423X) |
| BRACKET WEIGHT: | 2.4 kg (5.3 lb) |
| WIND SURFACE: | 0.11m ² (1.18ft ²) front - 0.19m ² (2.04 ft ²) side |
| WIND LOAD (160 km/h and 30°C) | 0.08 kN front - 0.19 kN side |
| SURVIVAL WIND: | 220 km/h (136.7 mph) |
| PACKING DIMENSIONS: | Box 800x800x200mm - 10kg (31.5x31.5x7.8 in - 22.04lb) |

Specification are subject to change without notice



ARRAY FEATURES

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

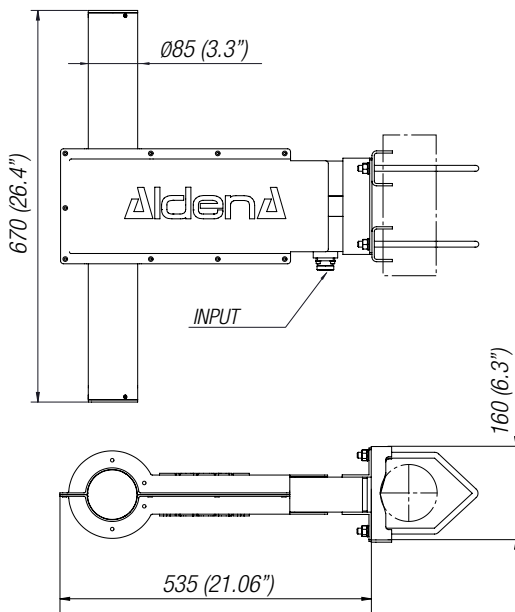
ARRAY ELECTRICAL DATA

| | |
|--------------------|--|
| FREQUENCY RANGE | 174 ÷ 230 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 ≤ 1.25 throughout the frequency range 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 | No |
| MOUNTING HARDWARE | Optional mounting for side mount configuration |

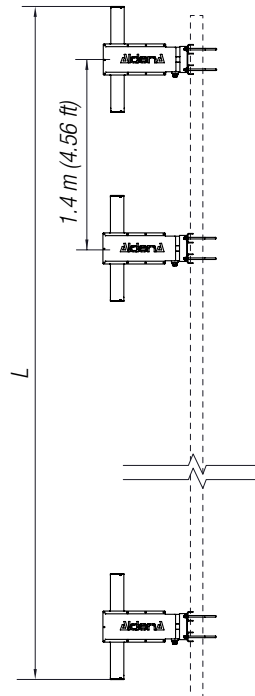
ANTENNA DIMENSIONAL DETAILS



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 | 5.5 | 3.5 | 25 (55.1) | 2.0 (6.6) | 0.38 |
| 4 | 1 | 8.7 | 7.4 | 60 (132.3) | 4.8 (15.7) | 0.76 |
| 6 | 1 | 10.5 | 11.2 | 95 (209.4) | 7.6 (24.9) | 1.14 |
| 8 | 1 | 11.8 | 15.1 | 130 (286.6) | 10.4 (34.12) | 1.52 |
| 12 | 1 | 13.6 | 22.9 | 198 (436.5) | 16.0 (52.5) | 2.28 |
| 16 | 1 | 14.9 | 30.9 | 270 (595.2) | 21.6 (70.9) | 3.04 |

- (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) Referred to Aluminum model ADB010421X and 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 Tower top/side spine Special hardware/brackets |
| TRANSMISSION LINE | Transmission line system design and layout |
| COMBINERS/FILTERS | Combiners/Filters to suit requirements can be supplied |
| CALCULATION SERVICES | Coverage/interference simulations EM Near Field control and reduction (Environmental impact studies) |
| ON-SITE SERVICES | Site Survey and Inspection Installation/commissioning and supervising Drive test & EM Field strength measurements After sales maintenance |
| TRAINING | Technical 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