



ANTENNA FEATURES

- Dipole antenna.
- Vertical polarization.
- Broadband 215÷245 MHz.
- Omnidirectional radiation pattern.
- Hot dip galvanized steel version.
- Analogue/Digital Service.

RADIATION PATTERNS (Mid Band)

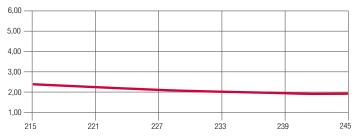
| | 0.08 |
|------|------|
| 180° | 180° |

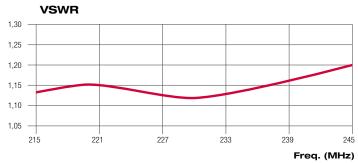
H - Plane

| ELECTRICAL DATA | |
|-----------------------------|--|
| WORKING BAND: | 215 - 245 MHz |
| BANDWIDTH: | VHF band III |
| GAIN: | 2.2 dBd (4.4 dBi) |
| VSWR: | ≤ 1.2:1 (-20.8 dB) |
| POLARIZATION: | Vertical |
| IMPEDANCE: | 50 Ohm unbalanced |
| HALF POWER BEAMWIDTH: | E-Plane - 81° |
| | H-Plane - 201° |
| LIGHTNING PROTECTION: | All metal parts DC grounded |
| | including inner conductors |
| AVAILABLE VERSION AND CODE: | ADE0104221- DIN 7/16 female - max 500W rms |
| | ADE0104222 - EIA 7/8" - max 1000W rms |
| | ADE0104222A - EIA 7/8" 90° up/down - 1000W rms |

GAIN (dB)

E - Plane





| MECHANICAL | DATA |
|---------------------|--|
| | |
| MATERIALS: | Hot dip galvanized steel body, brackets and bolts |
| | Aluminium internal line |
| MOUNTING: | Directly on supporting structure |
| MOUNTING BRACKETS: | Included for Ø40÷114mm pipe (Ø1 5/8" - 4") |
| ICING PROTECTION: | Optional ABS radome (XRADE) |
| TREATMENTS: | Hot dip galvanized body |
| | Silver plated connector |
| PRESSURIZATION: | No |
| ANTENNA DIMENSIONS: | 580x570x50 mm (22.8x22.4x1.96 in) |
| WEIGHT: | 6 kg (13.2 lb) |
| WIND SURFACE: | 0.03m ² (0.09 ft ²) front - 0.06m ² (0.19 ft ²) side |
| WIND LOAD | 0.002 kN front - 0.05 kN side |
| (160 km/h and 30°C) | |
| 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

0.50

0.60







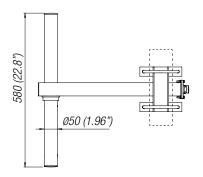
ARRAY FEATURES

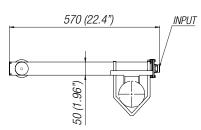
- Omnidirectional patterns
- Equal or unequal power distribution system
- Configurable for specific azimut and elevation pattern
- Suitable for multiplexing many channels

| FREQUENCY RANGE | 215 ÷ 245 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 | ≤ 1.14 in the operating channels or |
| | ≤ 1.2 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





| 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/interferfence simulations EM Near Field control and reduction (Environmental impact studies) | |
| ON-SITE SERVICES | Site Survey and Inspection Installation/commissioning and supervisioning Drive test & EM Field strength measurements | |

After sales maintenance

Techical training certification and consultancy

TRAINING

ARRAY TECHNICAL DATA ANTENNA LOAD(3 2 5.4 3.5 17 (37.4) 2.0 (6.6) 0.10 7.1 46 (101.4) 4.8 (15.7) 4 8.5 0.20 10.3 10.7 71 (151.1) 7.6 (24.9) 0.30 6 8 11.6 14.4 98 (210.0) 10.4 (34.12) 0.40

150 (330.7)

200 (440.9)

16.0 (52.5)

21.6 (70.9)

(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.

21.9

32.3

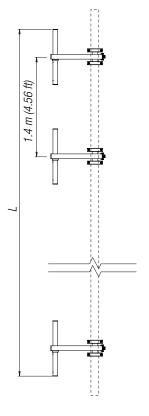
- (3) 160 km/h (100 mph) wind and 30°C (86°F) air temperature (L) Total Antenna Height.

13.4

15.1

12

16



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

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