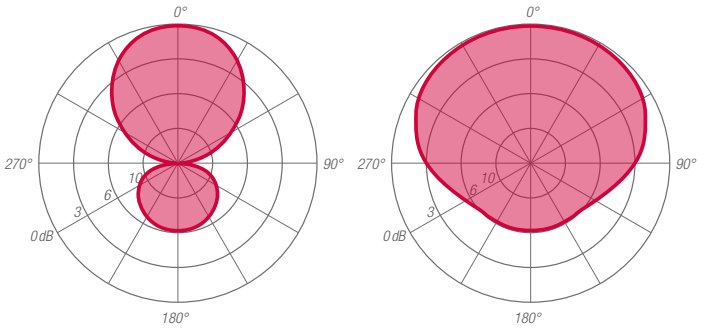
ANTENNA FEATURES

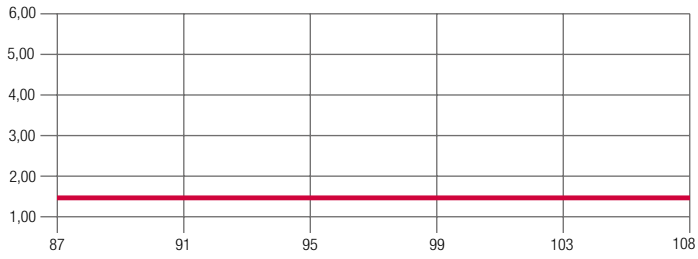
- Tuned dipole antenna.
- Vertical polarization.
- Bandwidth 0.2 MHz.
- Omnidirectional radiation pattern.
- Stainless steel.
- Demountable

RADIATION PATTERNS (Mid Band)

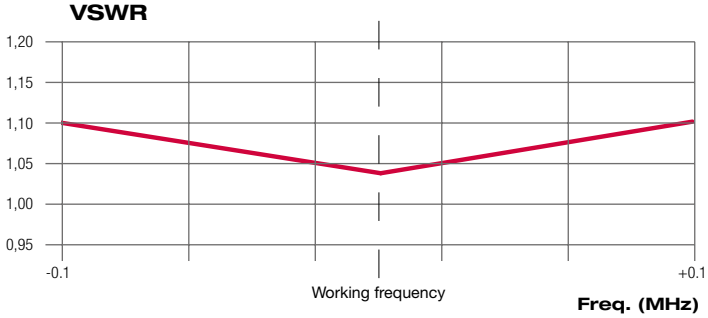


E - Plane **H - Plane**

GAIN (dB)



VSWR



ELECTRICAL DATA

WORKING BAND:	87.5 - 108 MHz
BANDWIDTH:	0.2 MHz
GAIN:	1.5 dBd (3.7 dBi)
VSWR:	≤ 1.1:1 (-26.4 dB)
POLARIZATION:	Vertical
IMPEDANCE:	50 Ohm unbalanced
HALF POWER BEAMWIDTH:	E-Plane - 86° H-Plane - 192°
LIGHTNING PROTECTION:	All metal parts DC grounded including inner conductors
AVAILABLE VERSION AND CODE:	AST0102235 - N - max 400W rms AST0102236 - DIN 7/16 female - max 1200W rms AST0102237 - EIA 7/8" - max 1800W rms

MECHANICAL DATA

MATERIALS:	Stainless steel body, bracket and bolts Aluminum junctions
MOUNTING:	Directly on supporting structure
MOUNTING BRACKETS:	Included for Ø60÷114mm pipe (Ø 2.36" - 4")
ICING PROTECTION:	Optional ABS radome (Code XRAST25)
TREATMENTS:	Aluminum componets military norms treatement (MIL-C-5541) Silver plated connector
PRESSURIZATION:	No
ANTENNA DIMENSIONS:	1500x1000x60 mm (59.0x39.3x2.36 in) *
ANTENNA WEIGHT:	3.5 kg (7.71 lb)*
WIND SURFACE:	0.04m² (0.43ft²) front - 0.06m² (0.64 ft²) side*
WIND LOAD (160 km/h and 30°C)	0.03 kN front - 0.05 kN side*
SURVIVAL WIND:	160 km/h (99.4 mph)
PACKING DIMENSIONS:	Box 1700x200x150mm - 5kg* (66.9x7.8x5.9 in - 11.0lb)

Note: (*) Dimensions depend on working frequency.
Current values are referred to 98.00 MHz frequency.

ARRAY FEATURES

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

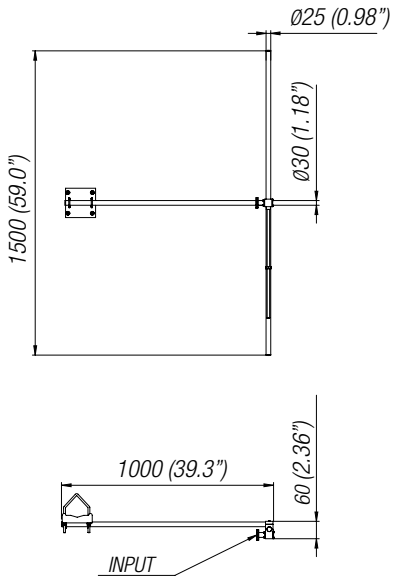
ARRAY ELECTRICAL DATA

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	≤ 1.1 in the working frequency 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

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

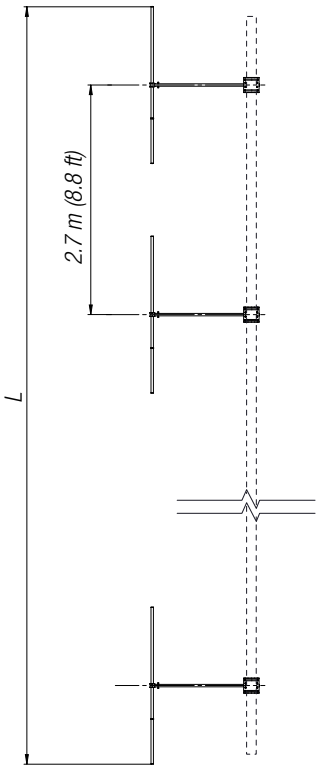


Note: Dimensions depend on working frequency.
Current values are referred to 98.00 MHz frequency.

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	5.2	3.31	26 (57.3)	4.1 (13.4)	0.10
4	1	8.42	6.64	45 (99.2)	9.5 (31.2)	0.20
6	1	10.22	10.52	67 (147.7)	14.4 (47.2)	0.30
8	1	11.49	14.09	84 (185.2)	19.6 (64.3)	0.41
12	1	13.27	21.23	126 (277.8)	30.0 (98.4)	0.60

(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.
Note: Current values are referred to 98.00 MHz frequency.



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.

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
TRAINING	Techical training certification and consultancy

Specification are subject to change without notice