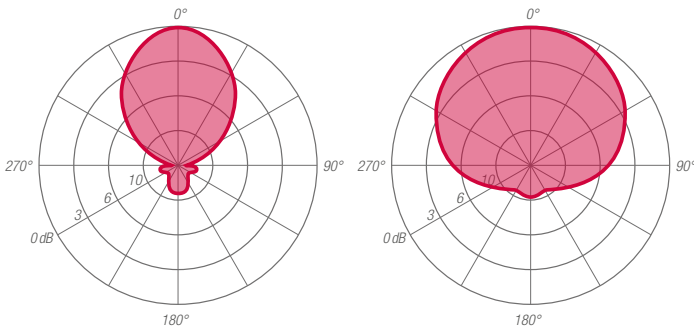




ANTENNA FEATURES

- Panel antenna with dipole 4.5 dBd gain.
- Vertical or horizontal polarization.
- Directional irradiation pattern.
- Broadband 87.5÷108 MHz.
- Demountable.
- Pressurizable.
- Aluminium or hot dip galvanized steel.

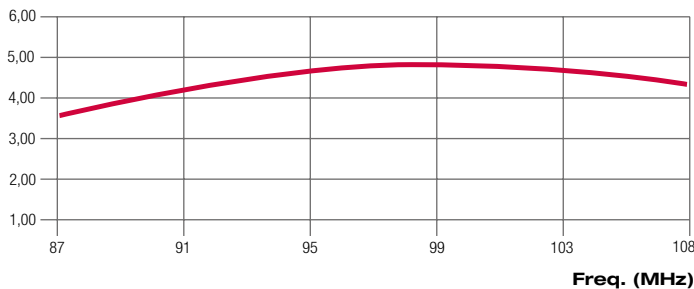
RADIATION PATTERNS (Mid Band)



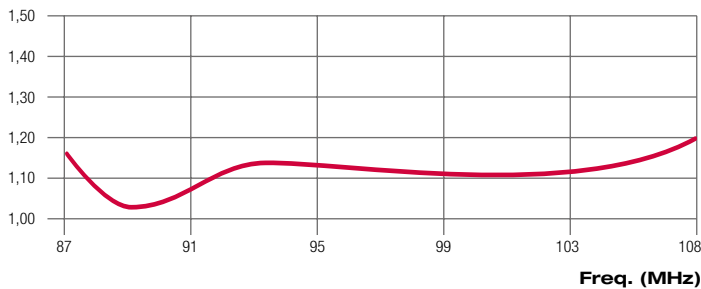
E - Plane

H - Plane

GAIN (dB)



VSWR



ELECTRICAL DATA

WORKING BAND:	87.5 - 108 MHz
BANDWIDTH:	VHF band FM
GAIN:	4.5 dBd (6.7 dBi)
VSWR:	≤ 1.2:1 (-20.8 dB)
POLARIZATION:	Vertical or Horizontal
IMPEDANCE:	50 Ohm balanced
HALF POWER BEAMWIDTH:	E-Plane - 74° H-Plane - 152°
LIGHTNING PROTECTION:	All metal parts DC grounded including inner conductors
AVAILABLE VERSION AND CODE:	ADP0102410 - EIA 7/8" connector - max 5000W rms ADP0102411 - DIN 7/16 connector - max 3000W rms ADP0102412 - N connector - max 800W rms ADP0102420 - EIA 7/8" connector - max 5000W rms ADP0102421 - DIN 7/16 connector - max 3000W rms ADP0102422 - N connector - max 800W rms

MECHANICAL DATA

MATERIALS:	Aluminium reflector (version ADP010241X) Hot dip galvanized steel reflector (version ADP010242X) Hot dip galvanized steel bracket and bolts
MOUNTING:	Directly on supporting structure
MOUNTING BRACKETS:	Included for Ø50÷114 mm pipe (Ø1.96" - 4+1/2")
ICING PROTECTION:	Optional feed point radome (code XRASD)
TREATMENTS:	Antenna body military norms treatment (MIL-C-5541 ver. ADB010421X) Silver plated internal lines and connector
ANTENNA DIMENSIONS:	1825x1080x1275 mm (71.8x42.5x50.2 in)
ANTENNA WEIGHT:	15 kg (33 lb) (ADP010241X version) 24 kg (52.9 lb) (ADP010242X version)
WIND SURFACE:	0.47m ² (5.05ft ²) front - 0.39m ² (4.19 ft ²) side
WIND LOAD (160 km/h and 30°C)	0.79 kN front - 0.60 kN side
SURVIVAL WIND:	220 km/h (136.7 mph)
PACKING DIMENSIONS:	Dipole: Box 1140x300x220mm (44.8x11.8x8.6 in) Reflecting grid: Box 1830x1280x80mm (72x50.3x3.14 in) Total weight: 21 kg gross (46.2 lb)
SPECIAL FEATURES:	ADP0102510 - as ADP0102410 with side ailreons ADP0102511 - as ADP0102411 with side ailreons ADP0102512 - as ADP0102412 with side ailreons

Specification are subject to change without notice



ARRAY FEATURES

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

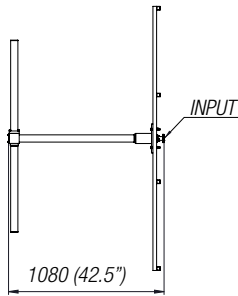
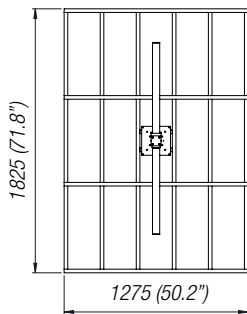
ARRAY ELECTRICAL DATA

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 ≤ 1.25 throughout the frequency range Antenna system VSWR value also depending from the supporting structure
POLARIZATION	Vertical (or horizontal upon request)
GAIN	Refer to table
HORIZONTAL PATTERN	Any type according to requirement
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



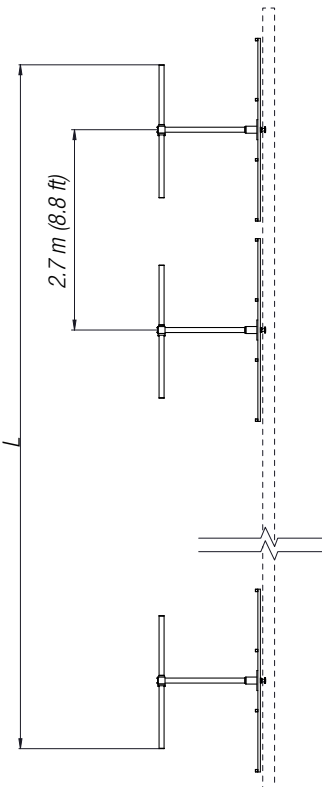
ARRAY TECHNICAL DATA

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	7.5	5.6	45 (99.2)	4.5 (14.7)	1,67
4	1	10.5	11.2	85 (187.4)	9.9 (32.4)	3,34
6	1	12.3	16.9	126 (277.7)	15.3 (50.2)	5,00
8	1	13.5	22.4	188 (414.5)	20.7 (67.9)	6,67
12	1	15.3	33.8	272 (599.5)	31.5 (103.3)	10,00

(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 ADPO10241X 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