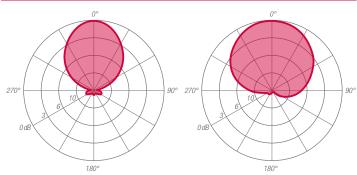


ANTENNA FEATURES

- Log periodic 5 elements 5.5 dBd gain.
- Circular, mixed, linear polarization.
- Broadband 87.5÷108 MHz.
- Directional radiation pattern.
- Aluminium or stainless steel version.

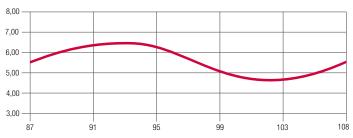
RADIATION PATTERNS (Mid Band)



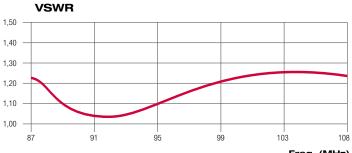
E - Plane Horizontal component

H - Plane Vertical component

GAIN (dB)



Freq.	(MHz)
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Freq. (MHz)

ELECTRICAL DATA	
WORKING BAND:	87.5 - 108 MHz
BANDWIDTH:	VHF band FM
GAIN:	5.5 dBd (7.7 dBi)
VSWR:	≤ 1.3:1 (-17.7 dB) Linear polarization
	≤ 1.3:1 (-24.3 dB) Circular polarization
POLARIZATION:	Circular, mixed, linear
IMPEDANCE:	50 Ohm unbalanced
HALF POWER BEAMWIDTH:	Vertical component: E-Plane - 69° - H-Plane - 129°
	Horizontal component: E-Plane - 69° - H-Plane - 129°
LIGHTNING PROTECTION:	All metal parts DC grounded
	including inner conductors
AVAILABLE VERSION AND CODE:	ALP0502910 - 2xEIA 7/8" flange - max 2x5000W rms
	ALP0502912 - 2xDIN 7/16 female - max 2x3000W rms
	ALP0502930 - 2xDIN 7/16 female - max 2x3000W rms
	ALP0502931 - 2xEIA 7/8" flange - max 2x5000W rms

MATERIALS:	Stailess steel version (ALP050293X)
	Aluminium version (ALP050291X)
	Hot dip galvanized steel brackets and bolts
MOUNTING:	Directly on supporting structure
	Safety parafil kit included
MOUNTING BRACKETS:	Included for Ø60÷114mm pipe (Ø 2.36" - 4+1/2")
ICING PROTECTION:	ABS radome included
TREATMENTS:	Powder painted elements and body grey color - RAL 7001
	(version ALP050291X)
	Silver-plated lines and connector
PRESSURIZATION:	No
ANTENNA DIMENSIONS:	1500x1716x1716 mm (62.2x67.5x67.5 in)
ANTENNA WEIGHT:	25.7 kg (56.6 lb) (Version ALP050293X)
	11.5 kg (25.3 lb) (Version ALP050291X)
BRACKET WEIGHT:	11.5 kg (25.3 lb)
WIND SURFACE:	0.1m ² (1.07ft ²) front - 0.38m ² (4.09 ft ²) side
WIND LOAD	0.09 kN front - 0.70 kN side
(160 km/h and 30°C)	
SURVIVAL WIND:	220 km/h (136.7 mph)
PACKING DIMENSIONS:	Box 1900x1600x200mm - 13kg (Version ALP050291X)
	(74.8x62.9x7.8 in - 28.6lb)
	Box 1900x1600x200mm - 25kg (Version ALP050293X)
	(74.8x62.9x7.8 in - 55.1lb)
SPECIAL FEATURES	Optional brackets side-by-side arrays (code XSTLOG-PER)

Specification are subject to change without notice







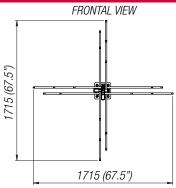
ARRAY FEATURES

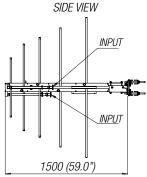
- Directional
- Equal or unequal power distribution system
- Configurable for specific azimut and elevation pattern
- Suitable for multiplexing many channels

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
	≤ 1.30 throughout the frequency range
	Antenna system VSWR value also depending from the
	supporting structure
POLARIZATION	Circular, mixed, linear
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





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

ARRAY TECHNICAL DATA ANTENNA LOAD(3 42 (92.5) 7.0 5.01 2 4.1 (13.4) 1,40 10.0 10.00 79 (174.1) 9.5 (31.1) 2,81 4 15.14 114 (251.7) 14.9 (46.5) 4,21 6 11.8 8 13.0 19.95 182 (401.2) 20.3 (48.8) 5,60

258 (568.7)

31.1 (102.0)

5,77

(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.

30.20

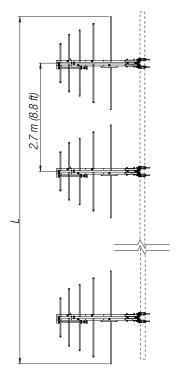
(2) Referred to Aluminum model ALP050291X and without mounting hardware (3) 160 km/h (100 mph) wind and 30°C (86°F) air temperature.

14.8

1

(L) Total Antenna Height.

12



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