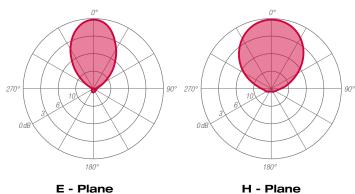


# ANTENNA FEATURES

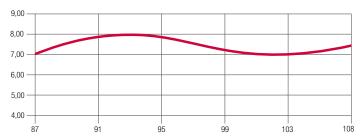
- Log periodic 8 elements 7.5 dBd gain.
- Vertical or horizontal polarization.
- Broadband 87.5÷108 MHz.
- Directional radiation pattern.
- Demountable.
- Aluminium.



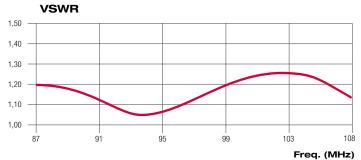


ELECTRICAL DATA			
WORKING BAND:	87.5 - 108 MHz		
BANDWIDTH:	VHF band FM		
GAIN:	7.5 dBd (9.7 dBi)		
VSWR:	≤ 1.28:1 (-18.2 dB)		
POLARIZATION:	Linear (Vertical or Horizontal)		
IMPEDANCE:	50 Ohm unbalanced		
HALF POWER BEAMWIDTH:	E-Plane - 55°		
	H-Plane - 78°		
LIGHTNING PROTECTION:	All metal parts DC grounded		
	including inner conductors		
AVAILABLE VERSION AND CODE:	ALP0802712 - EIA 7/8" - max 5000W rms		
	ALP0802713 - DIN 7/16" - max 3000W rms		

GAIN (dB)







MECHANICAL	DATA			
MATERIALS:	Aluminium			
	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:	Optional radome (code XRALP)			
TREATMENTS:	Antenna body military norms treatement (MIL-C-5541)			
	Powder painted elements and body grey color - RAL 7001			
	Silver-plated lines and connector			
PRESSURIZATION:	No			
ANTENNA DIMENSIONS:	2630x1770x117 mm (103.5x69.6x4.6 in)			
ANTENNA WEIGHT:	26 kg (57.3 lb)			
WIND SURFACE:	0.07m² (0.75ft²) front - 0.47m² (5.05 ft²) side			
WIND LOAD	0.05 kN front - 0.64 kN side			
(160 km/h and 30°C)				
SURVIVAL WIND:	220 km/h (136.7 mph)			
PACKING DIMENSIONS:	Box 2980x250x250mm - 18 kg (Antenna)			
	(117.3x9.8x9.8 in - 39.6 lb)			
	Box 360x310x400 - 20 kg (Bracket)			
	(14.2x12.2x15.7 in - 44.01 lb)x			
SPECIAL FEATURES	Mounting brackets for slant polarization (Cod. XSTLOG-ROT)			
	Mounting brackets for parallel arrays (Cod. XSTLOG-PER)			
	Antirotation fiberglass brace (Cod. XSTRUALP)			

Specification are subject to change without notice



### VHF Band II - FM Broadcasting -

### Series ALPO802712



## ARRAY **FEATURES**

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

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INPUT

ARRAY ELECTI	
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	$\leq$ 1.17 in the operating channels or
	$\leq$ 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.

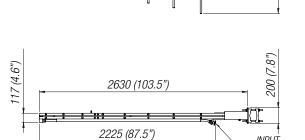
ARRAY MECHANICAL DATA				
HEIGHT OF ARRAY	Subject to number of bays			
TOTAL NET WEIGHT	Refer to table			
WIND LOAD	Refer to table			
PRESSURIZABLE	No			
MOUNTING HARDWARE	Optional mounting for side mount configuration			

#### ARRAY TECHNICAL DATA

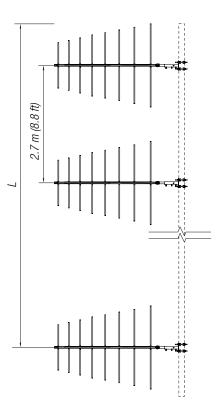
BAYS	Panels Per Bay	GAIN <sup>(1)</sup> dB	gain Times <sup>(1)</sup>	WEIGHT <sup>(2)</sup> kg (lb)	ANTENNA HEIGHT <sup>(L)</sup> m (ft)	WIND Load <sup>(3)</sup> kn
2	1	9.2	8.32	75 (165.3)	5.5 (13.4)	1.31
4	1	12.1	16.22	145 (319.6)	10.9 (31.1)	2.61
6	1	13.8	23.99	220 (485.0)	16.3 (46.5)	3.93
8	1	15.1	32.36	295 (650.3)	21.7 (48.8)	5.23
12	1	16.8	47.86	450 (992.1)	32.5 (102.0)	2.61

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.
Without mounting hardware.

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



OPTIONS & SERV	
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



#### 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

#### **TELECOMUNICAZIONI ALDENA SRL**

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