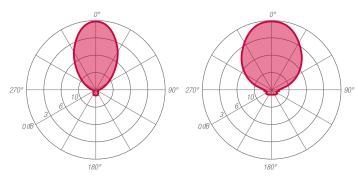




### **ANTENNA FEATURES**

- Log-periodic 11 elements 9 dBd gain.
- Vertical or horizontal polarization.
- Broadband 174÷230 MHz.
- Directional radiation pattern.
- Analogue/Digital Service.

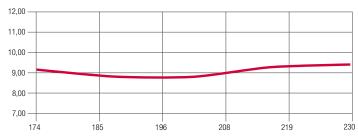
# **RADIATION PATTERNS** (Mid Band)



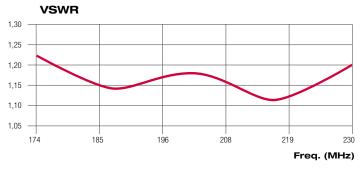
E - Plane
-----------

H - Plane

## GAIN (dB)



#### Freq. (MHz)



ELECTRICAL DATA	
WORKING BAND:	174 - 230 MHz
BANDWIDTH:	VHF band III
GAIN:	9 dBd (11.2 dBi)
VSWR:	≤ 1.22:1 (-20 dB)
POLARIZATION:	Linear (Vertical or Horizontal)
IMPEDANCE:	50 Ohm balanced
HALF POWER BEAMWIDTH:	E-Plane - 50°
	H-Plane - 68°
LIGHTNING PROTECTION:	All metal parts DC grounded
	including inner conductors
AVAILABLE VERSION AND CODE:	ALP1104711 - DIN 7/16 female - max 2000W rms
	ALP1104712 - EIA 7/8" - max 3000W rms

MECHANICAL	DATA			
MATERIALS:	Aluminium			
	Hot dip galvanized steel bracket and bolts			
MOUNTING:	Directly on supporting structure			
MOUNTING BRACKETS:	Included for Ø40÷114mm pipe (Ø1 5/8" - 4")			
TREATMENTS:	Powder painted elements and body grey color - RAL 7001			
	Silver-plated lines and connector			
PRESSURIZATION:	No			
ANTENNA DIMENSIONS:	2630x900x117 mm (103.5x35.43x4.6 in)			
ANTENNA WEIGHT:	14 kg (30.8 lb)			
BRACKET WEIGHT:	12 kg (26.4 kg)			
WIND SURFACE:	0.02m <sup>2</sup> (0.21 ft <sup>2</sup> ) front - 0.35m <sup>2</sup> (3.75 ft <sup>2</sup> ) side			
WIND LOAD	0.013 kN front - 0.52 kN side			
(160 km/h and 30°C)				
SURVIVAL WIND:	220 km/h (136.7 mph)			
PACKING DIMENSIONS:	Antenna box 2700x1100x220 mm - 80kg			
	(106.3x43.3x8.6 in - 176.3lb)			
	Bracket box 360x310x400 mm - 32kg			
	(12.2x14.2x15.7 inch - 70.5 lb)			
SPECIAL FEATURES:	Mounting brackets for slant polarization (Cod. XSTLOG-ROT)			
	Mounting brackets for parallel arrays (Cod. XSTLOG-PER)			
	Safety rope in parafil <sup>(R)</sup> & stainless steel turnbuckle			

(Cod. XPAR & XTEN1.5T)

Specification are subject to change without notice







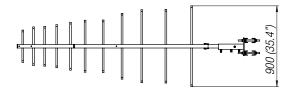
# **ARRAY FEATURES**

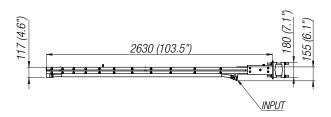
- Directional or custom patterns
- Equal or unequal power distribution system
- Configurable for specific azimut and elevation pattern
- Suitable for multiplexing many channels

FREQUENCY RANGE	174 ÷ 230 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	≤ 1.18 in the operating channels or
	≤ 1.23 throughout the frequency range
POLARIZATION	Vertical or Horizontal
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

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

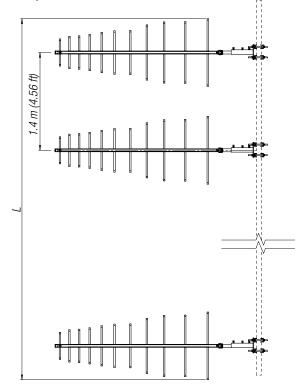




OPTIONS & SERV	ICES
PATTERN DESIGN	Custom azimuth and elevation (beam tilt and null fill)
	patterns can be designed to meet specific
	protection/coverage requirements
PATTERN CERTIFICATION	Proof-of-performance factory test and
	pattern measurements on ALDENA test plan area
MOUNTING HARDWARE	Turn-key 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								
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	10.9	12.3	69 (152.1)	2.4 (7.9)	1.04		
4	1	13.7	24.4	127 (279.9)	3.2 (10.5)	2.08		
6	1	15.3	33.9	186 (410.0)	8.0 (26.2)	3.12		
8	1	16.6	45.7	206 (454.1)	10.8 (35,4)	4.16		
12	1	18.3	67.6	304 (670.2)	16.4 (53.8)	6.24		
16	1	19.5	89.1	245 (540.1)	22.0 (72.2)	8.32		

- (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. Gain data is relative to array in vertical polarization.
- (2) 160 km/h (100 mph) wind and 30°C (86°F) air temperature (L) Total Antenna Height.



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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