

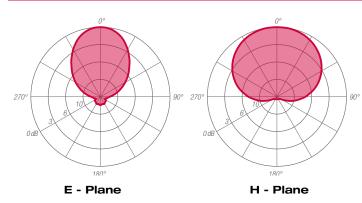
VHF Band III - DAB & TV Broadcasting _____Series ALPO4047xx



ANTENNA FEATURES

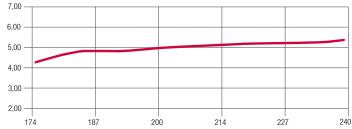
- Log-periodic 4 elements 5 dBd gain.
- Vertical or horizontal polarization.
- Broadband 174÷240 MHz.
- Directional radiation pattern.
- Aluminium or stainless steel version.
- Analogue/Digital Service.

RADIATION PATTERNS (Mid Band)

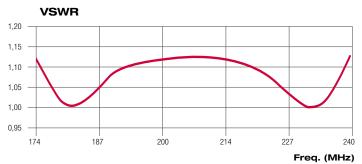


ELECTRICAL DATA WORKING BAND: 174 - 240 MHz BANDWIDTH: VHF band III GAIN: 5 dBd (7.2 dBi) VSWR: ≤ 1.13:1 (-24 dB) POLARIZATION: Linear (Vertical or Horizontal) IMPEDANCE: 50 Ohm balanced HALF POWER BEAMWIDTH: E-Plane - 65° H-Plane - 130° LIGHTNING PROTECTION: All metal parts DC grounded including inner conductors AVAILABLE VERSION AND CODE: ALP0404710 - DIN 7/16 female - max 2000W rms ALP0404711 - EIA 7/8" - max 3000W rms ALP0404730- DIN 7/16 female - max 2000W rms ALP0404731 - EIA 7/8" - max 3000W rms

GAIN (dB)



Freq. (MHz)



MECHANICAL	DATA				
MATERIALS:	Stainless steel (version ALP040473X)				
	Aluminium (version ALP040471X)				
	Hot dip galvanized steel bracket and bolts				
MOUNTING:	Directly on supporting structure				
MOUNTING BRACKETS:	Included for Ø40÷114mm pipe (Ø1 5/8" - 4")				
ICING PROTECTION:	Antenna body covered by ABS radome				
TREATMENTS:	Powder painted elements and body grey color - RAL 7001				
	(version ALP040471X)				
	Silver-plated lines and connector				
PRESSURIZATION:	No				
ANTENNA DIMENSIONS:	1046x1036x103 mm (41.81x40.78x4.05 in)				
ATNENNA WEIGHT:	12 kg (26.45 lb) (version ALP040473X)				
	8.7 kg (19.2 lb) (version ALP040471X)				
BRACKET WEIGHT:	4 kg (8.8 kg)				
WIND SURFACE:	0.036m ² (0.38 ft ²) front - 0.156m ² (1,67 ft ²) side				
WIND LOAD	0.03 kN front - 0.24 kN side				
(160 km/h and 30°C)					
SURVIVAL WIND:	220 km/h (136.7 mph)				
PACKING DIMENSIONS:	Box 1630x1950x150mm - 15kg				
	(64.17x76.77x5.9 in - 33lb)				
SPECIAL FEATURES:	Mounting brackets for slant polarization (Cod. XSTLOG-ROT)				
	Mounting brackets for parallel arrays (Cod. XSTLOG-PER)				

Specification are subject to change without notice



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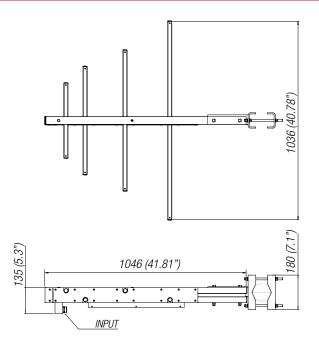
ARRAY **FEATURES**

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

ARRAY ELECTRICAL DATA						
FREQUENCY RANGE	174 ÷ 240 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 1.08 in the operating channels or					
	1.15 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					
	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

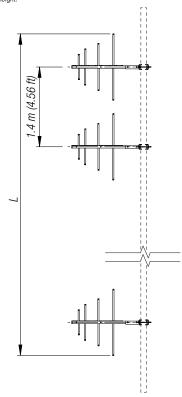


OPTIONS & SERV	ICES				
PATTERN DESIGN	Custom azimuth and elevation (beam tilt and null fill)				
	patterns can be designed to meet specific				
	protection/coverage requirements				
PATTERN CERTIFICATION	Proof-of-performance factory test and				
	pattern measurements on ALDENA test plan area				
MOUNTING 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				

ARRA)	/ TECH	INICAI	L DATA	<u>۱</u>		
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	9.0	7.9	32 (70.5)	2.4 (7.9)	0.48
4	1	11.9	15.5	54 (119.0)	3.2 (10.5)	0.96
6	1	13.6	22.9	87 (191.8)	8.0 (26.2)	1.44
8	1	14.7	29.5	110 (242.5)	10.8 (35,4)	1.92
12	1	16.4	43.6	185 (407.8)	16.4 (53.8)	2.88
16	1	17.7	58.9	245 (540.1)	22.0 (72.2)	3.84

(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.

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



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.

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