



### **ANTENNA FEATURES**

- Dipole antenna.
- Vertical polarization.
- Broadband 215÷245 MHz.
- Omnidirectional radiation pattern.
- Hot dip galvanized steel version.
- Analogue/Digital Service.

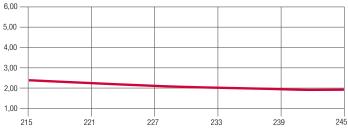
# **RADIATION PATTERNS** (Mid Band)

LLLC I RICAL BAIA		
WORKING BAND:	215 - 245 MHz	
BANDWIDTH:	VHF band III	
GAIN:	2.2 dBd (4.4 dBi)	
VSWR:	≤ 1.2:1 (-20.8 dB)	
POLARIZATION:	Vertical	
IMPEDANCE:	50 Ohm unbalanced	
HALF POWER BEAMWIDTH:	E-Plane - 81°	
	H-Plane - 201°	
LIGHTNING PROTECTION:	All metal parts DC grounded	
	including inner conductors	
AVAILABLE VERSION AND CODE:	ADE0104221- DIN 7/16 female - max 500W rms	
	ADE0104222 - EIA 7/8" - max 1000W rms	

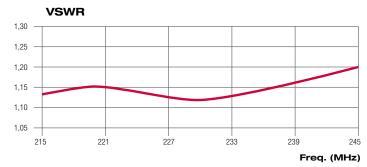
180° E - Plane

180° H - Plane

# GAIN (dB)



## Freq. (MHz)



MECHANICAL	DATA
MATERIALS:	Hot dip galvanized steel body, brackets and bolts
	Aluminium internal line
MOUNTING:	Directly on supporting structure
MOUNTING BRACKETS:	Included for Ø40÷114mm pipe (Ø1 5/8" - 4")
ICING PROTECTION:	Optionale ABS radome (XRADE)
TREATMENTS:	Hot dip galvanized body
	Silver plated connector
PRESSURIZATION:	No
ANTENNA DIMENSIONS:	580x570x50 mm (22.8x22.4x1.96 in)
WEIGHT:	6 kg (13.2 lb)
WIND SURFACE:	0.03m <sup>2</sup> (0.09 ft <sup>2</sup> ) front - 0.06m <sup>2</sup> (0.19 ft <sup>2</sup> ) side
WIND LOAD	0.002 kN front - 0.05 kN side
(160 km/h and 30°C)	
SURVIVAL WIND:	220 km/h (136.7 mph)
PACKING DIMENSIONS:	Box 800x800x200mm - 10kg
	(31.5x31.5x7.8 in - 22.04lb)

Specification are subject to change without notice





### **ARRAY FEATURES**

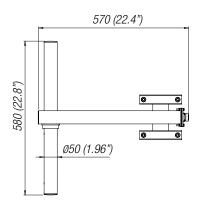
- Directional or custom patterns
- Equal or unequal power distribution system
- Configurable for specific azimut and elevation pattern Suitable for multiplexing many

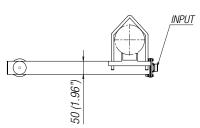
channels

FREQUENCY RANGE	215 ÷ 245 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	≤ 1.14 in the operating channels or
	≤ 1.2 throughout the frequency range
POLARIZATION	Vertical
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





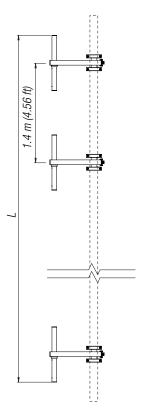
OPTIONS & SERVICES		
PATTERN DESIGN	Custom azimuth and elevation (beam tilt and null fill) patterns can be designed to meet specific protection/coverage requirements	
PATTERN CERTIFICATION	Proof-of-performance factory test and pattern measurements on ALDENA test plan area	
MOUNTING HARDWARE	Turn-key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

Techical training certification and consultancy

TRAINING

### ARRAY TECHNICAL DATA ANTENNA LOAD(3 2 5.4 3.5 17 (37.4) 2.0 (6.6) 0.10 8.5 7.1 46 (101.4) 4.8 (15.7) 0.20 4 10.3 10.7 71 (151.1) 7.6 (24.9) 0.30 6 8 11.6 14.4 98 (210.0) 10.4 (34.12) 0.40 21.9 0.50 12 13.4 150 (330.7) 16.0 (52.5) 16 15.1 32.3 200 (440.9) 21.6 (70.9) 0.60

- (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) 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

Specification are subject to change without notice