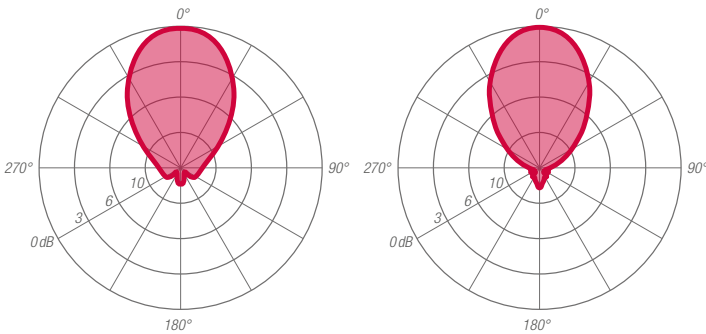




ANTENNA FEATURES

- Panel antenna 11 dBd gain.
- Elliptical polarization
(Available for 80%H-20%V, 75%H-25%V, 70%H-30%V)
- Broadband 470÷740 MHz.
- Directional radiation pattern.
- Designed for digital and/or analogue services.

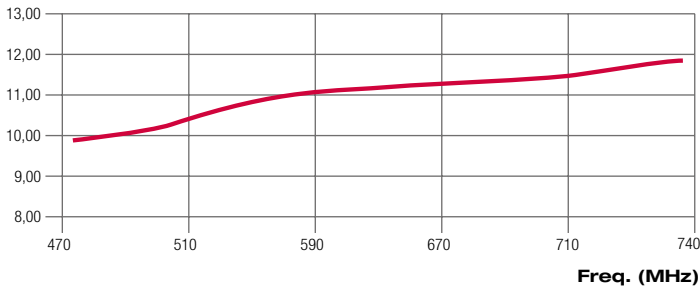
RADIATION PATTERNS (Mid Band)



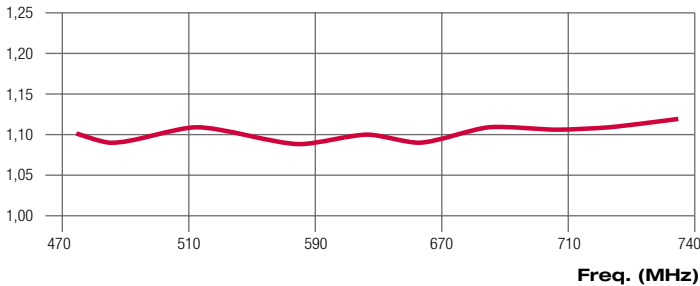
E - Plane
Horizontal component

H - Plane
Horizontal component

GAIN (dB)



VSWR



ELECTRICAL DATA

WORKING BAND:	470-740 MHz
BANDWIDTH:	UHF IV/V band
GAIN:	11 dBd (13.2 dBi)
VSWR:	≤ 1.12:1 (-25 dB)
POLARIZATION:	Elliptical by an integrated hybrid coupler (Available for 80%H-20%V, 75%H-25%V, 70%H-30%V)
IMPEDANCE:	50 Ohm balanced
HALF POWER BEAMWIDTH:	Horizontal component: E-Plane 66° ; H-Plane 26° Vertical component: E-Plane 25° ; H-Plane 60°
LIGHTNING PROTECTION:	All metal parts DC grounded including inner conductors
AVAILABLE VERSION AND CODE:	ATU0807420CE - EIA 7/8" -max. 1000W rms

MECHANICAL DATA

MATERIALS:	Reflector in stainless steel, brass internal lines and aluminium dipoles, teflon isolators, silicon O-rings
MOUNTING:	Directly on supporting structure via 4x M8 holes
MOUNTING BRACKETS:	Optional fixed brackets (cod. XZATUF) tiltable brackets (cod. XZATU)
ICING PROTECTION:	Whole antenna fully covered by fiberglass (SMC) radome Standard color RAL9010 white
TREATMENTS:	Silver-plated lines, dipoles and connector
PRESSURIZATION:	No
ANTENNA DIMENSIONS:	450x215x1000 mm (17.72x8.46x39.37 in)
WEIGHT:	17 kg (37.47 lb)
WIND SURFACE:	0.45 m ² (4.84 ft ²) front - 0.22 m ² (2.37 ft ²) side
WIND LOAD (160 km/h and 30°C)	0.83 kN front - 0.41 kN side
SURVIVAL WIND:	220 km/h (136.7 mph)
PACKING DIMENSIONS:	Box 530x1050x370 mm - 21 kg (20.87x41.34x14.57 in - 46.3 lb)
SPECIAL FEATURES:	Colored radome upon request (typically red, grey, green)

Specification are subject to change without notice



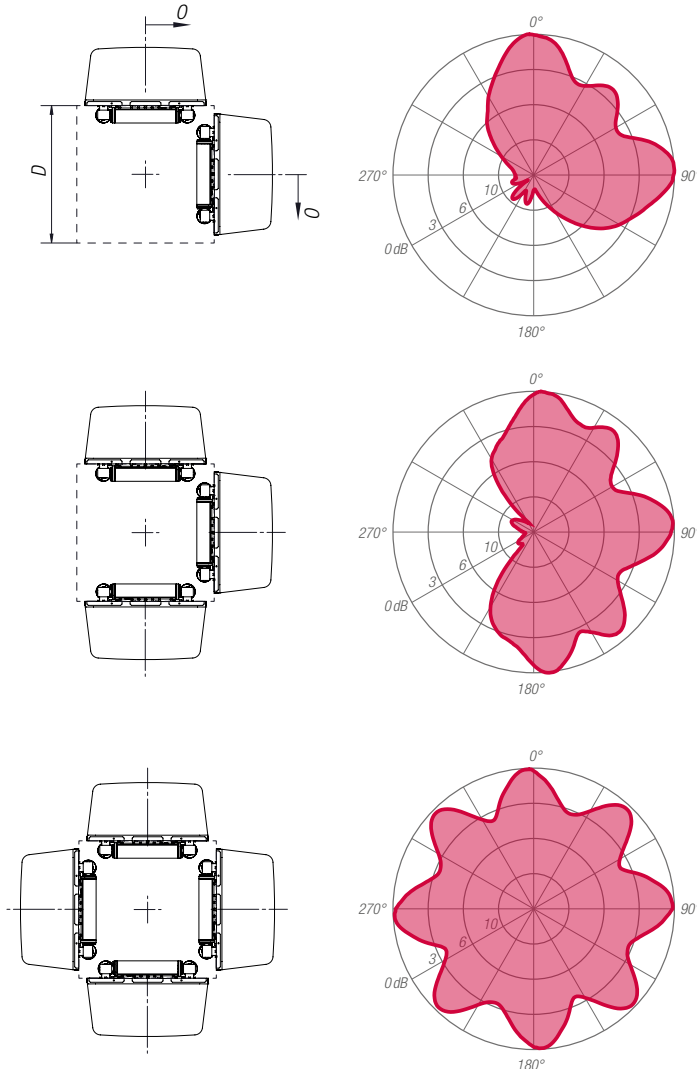
ARRAY FEATURES

- Omnidirectional or directional patterns
- Equal or unequal power distribution system
- Configurable for specific azimuth and elevation pattern
- Suitable for multiplexing many channels

ARRAY ELECTRICAL DATA

FREQUENCY RANGE	470 ÷ 740 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	≤ 1.05 in the operating channels or ≤ 1.15 throughout the frequency range Antenna system VSWR value also depending from the supporting structure
POLARIZATION	Elliptical (80%H-20%V, 75%H-25%V, 70%H-30%V)
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. The antenna system can be supplied in split feed configuration (two equal halves). Each half can accept full power.

TYPICAL HORIZONTAL PATTERNS



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 spine for top/side mount configuration

ARRAY TECHNICAL DATA

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	15.1	32.4	43 (94.8)	2.2 (7.2)	1.7
4	1	18.1	64.6	86 (189.6)	4.6 (15.1)	3.3
6	1	19.9	97.7	129 (284.4)	7.0 (23.0)	5.0
8	1	21.2	131.8	172 (308.6)	9.4 (30.8)	6.6
12	1	23.0	199.6	268 (590.8)	14.2 (46.6)	10.0
16	1	24.2	263.0	394 (868.6)	19.0 (62.3)	13.3
1	2	9.1	8.1	43 (94.8)	1.0 (3.3)	1.2
2	2	12.2	16.6	86 (189.6)	2.2 (7.2)	2.5
4	2	15.2	33.1	172 (308.6)	4.6 (15.1)	5.0
6	2	17.0	50.1	268 (590.8)	7.0 (23.0)	7.4
8	2	18.3	67.6	394 (868.6)	9.4 (30.8)	9.9
12	2	20.0	100.0	536 (1175.0)	14.2 (46.6)	14.9
16	2	21.3	134.9	788 (1737.2)	19.0 (62.3)	19.8
1	3	7.6	5.8	62 (136.7)	1.0 (3.3)	1.7
2	3	10.6	11.5	124 (273.4)	2.2 (7.2)	3.3
4	3	13.7	23.4	248 (546.7)	4.6 (15.1)	6.6
6	3	15.5	35.5	382 (842.2)	7.0 (23.0)	9.9
8	3	16.7	46.8	546 (1203.7)	9.4 (30.8)	13.2
12	3	18.5	70.8	764 (1366.9)	14.2 (46.4)	19.8
16	3	19.8	95.5	1072 (2363.3)	19.0 (62.3)	26.4
1	4	5.5	3.5	86 (189.6)	1.0 (3.3)	1.7
2	4	8.6	7.2	172 (308.6)	2.2 (7.2)	3.3
4	4	11.7	14.8	394 (868.6)	4.6 (15.1)	6.6
6	4	13.5	22.4	536 (1181.7)	7.0 (23.0)	9.9
8	4	14.7	29.5	788 (1737.2)	9.4 (30.8)	13.2
12	4	16.5	44.7	1072 (2363.3)	14.2 (46.4)	19.8
16	4	17.8	60.3	1576 (3474.5)	19.0 (62.3)	26.4

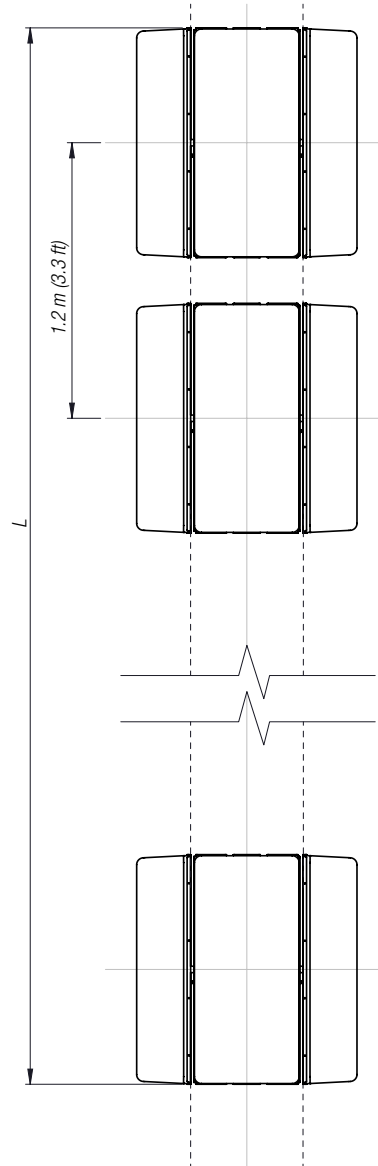
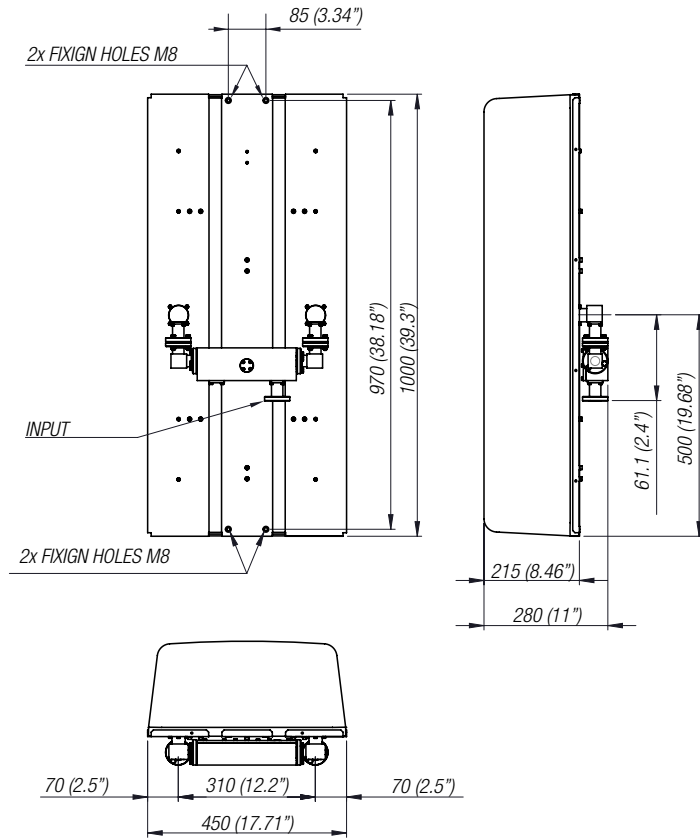
Note:
Antenna Distance (D) and Antenna Offset (O) are subject to change according to requirement.
Custom designed antennas meeting special requirements such as specific azimuthal pattern, different gains and custom power input are available upon request.

(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) Without mounting hardware.
(3) 160 km/h (100 mph) wind and 30°C (86°F) air temperature.
(L) Total Antenna Height.

Specification are subject to change without notice

ANTENNA DIMENSIONAL DETAILS

ARRAY VERTICAL HEIGHT



Note:
Total Antenna Height (L) is subject to change according to requirement.

OPTIONS & SERVICES

<i>PATTERN DESIGN</i>	Custom azimuth and elevation (beam tilt and null fill) patterns can be designed to meet specific protection/coverage requirements
<i>PATTERN CERTIFICATION</i>	Proof-of-performance factory test and pattern measurements on ALDENA test plan area
<i>MOUNTING HARDWARE</i>	Turn-key antenna delivering Tower top/side spine Special hardware/brackets
<i>TRANSMISSION LINE</i>	Transmission line system design and layout
<i>COMBINERS/FILTERS</i>	Combiners/Filters to suit requirements can be supplied
<i>CALCULATION SERVICES</i>	Coverage/interference simulations EM Near Field control and reduction (Environmental impact studies)
<i>ON-SITE SERVICES</i>	Site Survey and Inspection Installation/commissioning and supervising Drive test & EM Field strength measurements After sales maintenance
<i>TRAINING</i>	Technical training certification and consultancy

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