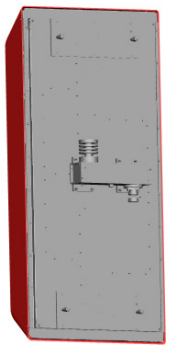
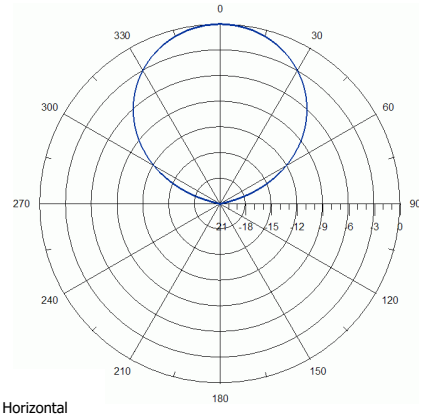
AT15-245

Band IV/V circular/elliptical polarization panel • Especially suitable for square masts

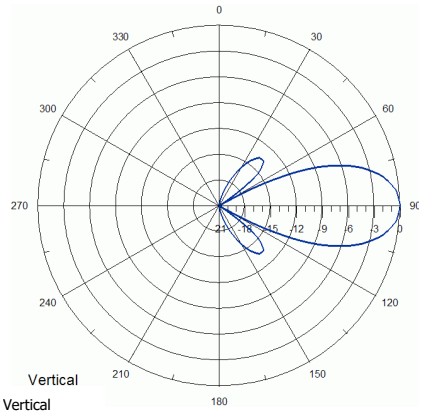
Electrical Specifications

Frequency range	470-722 MHz	
Gain (Total field)	11.1 dB (ref. λ/2 dipole)	
Gain (linear component for circular polariz.)	8.1 dBd (H. Pol.)	8.1 dBd (V. Pol.)
3 dB beam width	Horizontal: 61º	Vertical: 27º
Polarization	Circular or Elliptical (supplied by an integrated hybrid coupler)	
Polarization ratio options	Any from 50%H - 50%V to 80%H -20%V	
Impedance	50 Ohm	
VSWR	≤1.13:1	
Maximum power handling RMS	1 kW	2.5 kW
Connector type	DIN 7/16	EIA 7/8"
Pressurization	Non pressurized	Gas barrier on input connector





Horizontal Pattern



Vertical Pattern

Mechanical & Environmental Specifications

Materials	Reflector & radiating elements	Aluminium (Stainless steel available on request)
	Radome	Fiberglass
	Radome colour	Red or white on request
Dimensions (W x D x H)		483 x 264 x 983 mm
Maximum wind speed		220 km/h
Wind load (front)		743 N (@160 km/h)
Wind load (lateral)		258 N (@160 km/h)
Weight		13 kg including hybrid
Typical mounting		Square typical (other combinations depending on the radiation pattern required)
Vertical spacing		1000 mm
Grounding		DC grounded
Temperature range		-40°C to +80°C
Humidity		100%

Antenna System Characteristics

Number of Bays	Number ant. per bay	Peak gain (dBd)	Weight (kg)	Wind load (@160 km/h)	System height (mm)
1	2	8.1	26	1.1 kN	1000
	3	6.4	39	1.6 kN	
	4	5.2	52	1.5 kN	
2	2	11.1	52	2.2 kN	2000
	3	9.4	78	3.2 kN	
	4	8.2	104	3.1 kN	
4	2	14.4	104	4.4 kN	4000
	3	12.4	156	6.4 kN	
	4	11.2	208	6.2 kN	
6	2	15.9	156	6.6 kN	6000
	3	14.1	234	9.6 kN	
	4	13.0	312	9.3 kN	
8	2	17.2	208	8.8 kN	8000
	3	15.4	312	12.8 kN	
	4	14.2	416	12.4 kN	

The above specified gain must be understood for circular polarization

NOTES:

- Table supplies data up to 8 bays only for simplification purposes; systems with more bays are available.
- Null fill, beam tilt, harness & feeder losses NOT INCLUDED.
- Wind load & weight figures without considering cables, splitters & hardware.

Optional

The panel can be supplied without the input hybrid thus displaying two connectors (DIN 7/16 or EIA 7/8"), one feeding an HPOL array and one feeding a VPOL array.

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