PALS® | Communications & Technology

PMAR-35

PMAR-35

Maritime VSAT antenna with 130 cm dish size with a 3-axis motion system for stability and a 4-axis tracking system.

The 0.35m diameter dish system is so far the smallest antenna in the PALS PMAR Series portfolio. It's high-end technical features allow reliable functionality even in regions with fading signals or under harsh weather conditions.

The 3-axis motion system makes the antenna free to move and point to whichever direction the satellite is.

The PMAR-35 has been designed to address the communication needs of superyachts, oil and gas platforms, navy boats and frigates, cruise ships and all other vessels demanding a strong and reliable yet easy-to-install satellite system for communication at sea.

The PMAR-35 reaches excellent tracking performance under the hardest maritime motion profile.

Key Features

- Available in Ku and Ka-Band
- Independence of GPS information
- Fast initial pointing time to satellite
- High tracking accuracy
- Perfect tracking stability
- Fast blockage recovery time
- Fast satellite switchover
- Convenient use
- Convenient maintenance
- Use 3-axil stability , 4-axial tracking system

TURKEY

P : +90 216 540 72 57
M : sales@pals.com.tr
W : www.pals.com.tr

NETHERLANDS

P : +31 6 85 52 63 16
M : sales@pals-comsat.com
W : www.pals-comsat.com

PMAR-35

Electrical performance data				
Antenna aperture	0.35m			
Reflector material	Carbon fiber			
Antenna form	Circle symmetrical reflector and cap feed			
Frequency (GHz)	Ku-band 2 port		Ka band 2 port circularization feed	
	Rx	Tx	Rx	Tx
	10.70	13.75	17.7	27.4
	12.75	14.50	21.2	31.0
POL	Horizontal /vertical linear polarization		LHCP/RHCP	
Gain （dBi）	31.1+20lg(f/12.25)	32.3+20lg(f/14.0)	35.2+20lg(f/19.6)	38.7+20lg(f/29.4)
1st side lobe （dB）	≤-14		≤-14	
G/T(dB/k)	9.3		11.37	
Cross POL （dB）	35 (axial)		-	
Axial ratio (dB)	-		1.5	
Tx-Rx isolation （dB）	85	-	85	-
RX-TX isolation（dB）	-	30	-	30
VSWR	1.50:1	1.40:1	1.50:1	1.40:1

Mechanical data	
Motion range of AZ	360°continuous
Motion range of EL	-8°- 100°
Motion range of roller	± 20°
Motion range of POL	± 110°
AZ revolution	100°/s
EL revolution	100°/s
AZ acceleration	200°/s²
EL acceleration	200°/s²
Pointing accuracy	≤0.2°（R.M.S）
Initial acquisition time	≤ 2min
Blockage recovery time	≤5s（blockage 20min）
Weight of product	Modem inside: ≤6.5Kg（including antenna system，16W KU Transceiver and IQ200 modem）; Modem outside: ≤7.5Kg（including antenna system，16W KU Transceiver）
Profile dimension	Modem inside: ≤φ405*H410mm (diameter*height); Modem outside: ≤φ405*H398mm (diameter*height).
Electrical performance	
Power supply of system	DC18-60V
Power consumption	80W
Positioning mode	GPS+BD
Steady type	3-axial stability, 4-axis tracking

Environment data	
Operating temperature	-40°C-+55°C
Storage temperature	-55°C-+70°C
Protection grade	IP55
Operating humidity	0%-98%