



## PAIR-35

The PAIR-35 Airborne Antenna System features a 0.35m dish and is equipped with a 3-axes motion system for stability and a 4-axes tracking system. This design ensures robust performance across various platforms.

The PAIR Series is renowned for its proven, reliable performance on aircraft, ships, go-fast boats, and a wide range of military wheeled and tracked vehicles.

Its modular architecture includes a common gimbal and certified RF payloads, allowing band switching in under five minutes.

The PAIR-35 is specifically designed for extended-duration aerial intelligence, surveillance, and reconnaissance (ISR) missions, providing crucial beyond line of sight (BLOS) satellite communication.

Maintaining a stable link during dynamic platform motion is critical for SATCOM-on-the-Move (SOTM) solutions. The PAIR-35 combines high-bandwidth line-of-sight stabilization with an integrated tracking receiver, ensuring exceptional satellite tracking accuracy.

## Key Features

- Available in Ku and Ka Bands
- Designed for aircraft, ships, go-fast boats, and military vehicles
- Fast initial satellite pointing time
- High tracking accuracy
- Exceptional tracking stability
- Rapid blockage recovery time
- Fast satellite switching time: < 8 seconds
- Easy maintenance
- Dynamic pointing and dynamic satellite switching
- 4-Axes tracking system



#### GENERAL SPECIFICATIONS

Reflector Diameter	0.35m
POL Mode	Ku Band Linear / Ka Band Circular
Pointing Satellite Mode	Auto
Protection Grade	IP 55
Weight	≤6.5Kg with 16W Transceiver ≤7.5Kg with 16W Transceiver and IQ200 Modem
Dimension	With Modem 405x410mm Without Modem 405x398mm
Power Supply	DC 18-60V
Power Consumption	80W

#### RF CHARACTERISTICS

		Ku-Band	Ka-Band
Frequency (GHz)	Tx	13.75 - 14.50	27.40 - 31.00
	Rx	10.70 - 12.75	17.70 - 21.20
Antenna Gain (±0.2 dBi)	Tx	32.40 @ 14.25 GHz	38.90 @ 29.00 GHz
	Rx	31.20 @ 11.70 GHz	35.40 @ 19.00 GHz
Polarization		2 Port Linear (3 Port Optional)	Circular
Satellite Operator Compliancy		Compliant with most of satellite operator requirements	
VSWR	Tx	1.50:1	1.50:1
	Rx	1.40:1	1.40:1
Cross Polar Isolation		>35 dB within 1 dB beamwidth	
Tx-Rx isolation (dB)		85	85
RX-TX isolation (dB)		30	30

#### MECHANICAL SPECIFICATIONS

	Azimuth	Elevation	Polarization	Roller
Antenna Range	360° continuous	-8° - 100°	± 110°	± 20°
Antenna Speed	100°/s	100°/s		
Antenna Acceleration	200°/s²	200°/s²		

#### CONTROL SPECIFICATIONS

Pointing accuracy	≤0.2° (R.M.S)
Initial acquisition time	≤ 2min
Blockage recovery time	≤5s (blockage 20min)

#### ENVIRONMENTAL SPECIFICATIONS

Operation Temperature	-40 ~ +55°C
Storage Temperature	- 50 ~ +70°C
Humidity	98%

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