



Size:

0.35m

## PAIR-35

### Advanced Stabilization for Dynamic Platforms

The PALS PAIR-35 is a 0.35m antenna system with a 3-axes stability and 4-axes tracking system, delivering exceptional stability for SATCOM-on-the-Move across aircraft, ships, and military vehicles. Its proven design ensures robust, reliable connectivity on any dynamic platform.

### Modular Agility for Critical Missions

Featuring a modular design with a common gimbal and certified RF payloads, the system enables rapid band switching in under five minutes. This agility makes it ideal for extended-duration aerial SATCOM missions, providing critical Beyond Line of Sight (BLOS) communication for real-time data and command.

### Precision Tracking for Uninterrupted Links

The PAIR-35 combines high-bandwidth stabilization with an integrated tracking receiver to achieve exceptional satellite tracking accuracy. This ensures a stable, secure, and continuous communication link, which is vital for mission success during high-motion operations and intelligence gathering.

### Key Features

- Ku, Ka Bands available
- 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
POL Mode
Pointing Satellite Mode
Stabilization Platform
Protection Grade
Weight
Weight With Modem
Dimension With Modem
Dimension Without Modem
Power Consumption

**PAIR-35**

0.35m
Ku Band Linear / Ka Band Circular
Auto
3-Axes for stability, 4-axes for tracking
IP 55
≤6.5Kg with 16W Transceiver
≤7.5Kg with 16W Transceiver and IQ200 Modem
405x398mm"
405x398mm
80W

**RF CHARACTERISTIC**

Frequency (GHz) Tx
Frequency (GHz) Rx
Gain (dBi) Tx
Gain (dBi) Rx
Polarization
Tx/ Rx Isolation (dB)
Rx/Tx Isolation (dB)
Cross Polarization (dB)
Radiation Pattern Compliancy

**Ku-Band**

13.75-14.50
10.70 -12.75
32.40 @ 14.25 GHz
31.20 @ 11.70 GHz
2 Port Linear (3 Port Optional)
85
30
>35 dB within 1 dB beamwidth
Compliant with MIL-STD-188-164A, ITU - RS-580 and ITU-RS-465-6

**Ka-Band**

27.40-31.00
17.70 - 21.20
38.90 @ 29.00 GHz
35.40 @ 19.00 GHz
Circular
85
30
>35 dB within 1 dB beamwidth
Compliant with MIL-STD-188-164A, ITU - RS-580 and ITU-RS-465-6

**MECHANICAL SPECIFICATIONS**

Motion Range
Antenna Speed
Antenna Acceleration
Antenna Acceleration
Pointing accuracy
Initial acquisition time
Blockage recovery time

**Azimuth**

360° continuous
100°/s
200°/s2
Antenna ≤ 13kg
≤0.2° (R.M.S)
≤ 2min
≤5s (blockage 20min)

**Elevation**

-8° - 100°
100°/s
200°/s2

**Polarization**

± 110°

**Roll**

± 20°

**ENVIRONMENTAL SPECIFICATIONS**

Temperature Range Operational
Temperature Range Survival
Humidity

**PAIR-35**

-40~+55°C
- 50~ +70°C
98%

Specifications are subject to change.

