



Size: 0.35m

POMA-35

The Compact SOTM Solution for Mobile Missions

Setting a new global standard, the POMA-35 is a compact Land-on-the-Move (SOTM) antenna system. It delivers seamless, real-time Ku and Ka-band satellite connectivity for mission-critical voice, video, and data, ensuring uninterrupted communication for mobile command, emergency response, and broadcast from any vehicle in any terrain.

Advanced Engineering in a Minimal Footprint

Its revolutionary design features a highly reliable direct-drive mechanism for precise pointing, coupled with a cap-design feed for exceptional efficiency and low side lobes. The system offers robust, simultaneous dual-band (Ku/Ka) operation without changing hardware, maximizing versatility and performance from its ultra-compact form.

Autonomous, Secure, and Simple Operation

The POMA-35 ensures operational security and ease with its self-contained functionality. It operates independently of GPS, using advanced satellite beacon tracking to auto-correct gyro drift. After a simple one-time entry of coordinates, it delivers fully automatic, secure, and reliable satellite acquisition and tracking on the move.

Key Features

- Ku and Ka bands available, The tracking error <math><0.5\text{ dB RMS}</math> without blockage
- Blockage recovery in <math><3</math> seconds for blockage <math><5</math> minutes; recovery in <math><5</math> seconds for blockage <math><20</math> minutes
- Dynamic Pointing and Switching, real-time satellite pointing and seamless satellite switching while in motion
- Good Tracking Stability, the AZ system uses a closed-loop stabilization algorithm for precise satellite tracking, even during fast movements or "S" travel
- Supports OpenAmip
- 3-Axes tracking, 4-axes stability
- Optional 4G/ 5G/LTE supported modem for load balancing and bonding solutions





GENERAL SPECIFICATIONS

Reflector Diameter
Reflector Material
Stabilization Platform
Antenna form
Positioning Mode
Modem Interface
Modem Support
Power Supply

POMA-35

0.35m
Carbon-Fiber
3-Axes Stability, 4-Axes Tracking
Circular symmetrical reflector and cap feed
GPS
Ethernet, OpenAMIP
iDirect, Newtec, Gilat, Datum, Comtech, THISS etc.
DC18-36V

RF CHARACTERISTIC

Frequency (GHz) Tx
Frequency (GHz) Rx
Feed Form
POL form
Antenna Gain (dBi) Tx
Antenna Gain (dBi) Rx
Antenna Pattern Compliancy
Cross POL (dB)
Axial ratio (dB)
Tx-Rx isolation (dB)
Rx-Tx isolation (dB)
EIRP (dBw)
G/T (dB/k)

Ku-Band

13.75 - 14.50
10.70 - 12.75
2 ports, Linear polarized Feed
H/V Linear
32.0+20lg(f/14.0)
30.6+20lg(f/12.25)
ITU-R S.580-6 and ITU-R S.465-6
35 (axis)
-
85
30
47.2 (50W BUC)
9.6

Ka-Band

29.0 - 30.0
18.7 - 20.2
2 ports, circular polarized Feed
LHCP/RHCP
38.3+20lg(f/29.4)
35.0+20lg(f/19.6)
ITU-R S.580-6 and ITU-R S.465-6
-
1.5
85
30
47.5 (10W BUC)
11

MECHANICAL SPECIFICATIONS

Antenna Motion Range
Antenna Revolution
Antenna Acceleration
Pointing Accuracy
Initial Acquisition Time
Blockage Recovery Time
Weight of Product
Radome Size

Azimuth

360° con. rotation without limit
100°/s
200°/s ²
≤0.2° (R.M.S)
≤ 2min
≤5s (cover for 5 minutes)
≤10Kg
Φ420×595 mm (Dx H)

Elevation

-5° -100°
100°/s
200°/s ²

Polarization

± 110°

ENVIRONMENTAL SPECIFICATIONS

Wind Speed Operational
Temperature Range Operational
Temperature Range Survival
Protection Grade
Humidity

POMA-35

Max.216km/h at any direction
-40°C-+55°C
-55°C-+70°C
IP65
0%-98%

Specifications are subject to change.