



Size: 0.40m

POMA-40

Advanced SOTM Technology for Land Vehicles

The SOTM POMA-40 is a high-performance Ku/Ka band terminal for HTS and GEO satellites. Its compact, fully integrated design combines a parabolic feed, LNA, and servo controls, enabling land vehicles and unmanned platforms to maintain real-time video, IP calls, and broadband internet access via satellite while on the move.

Robust, Independent Tracking

Engineered for resilience, it uses satellite beacon tracking to correct gyro errors, operating independently of GPS with only initial manual coordinates. It ensures rapid deployment with satellite acquisition in under 60 seconds (hot start/manual) and under 80 seconds from a cold GPS/BD start.

Critical Asset for Military & Emergency Communications

This terminal is widely deployed on military platforms to enhance combat effectiveness. It is also a vital asset for police, fire, and medical emergency units, providing reliable, secure satellite communications for crisis management, disaster relief, and field command coordination.

Key Features

- Ku and Ka Bands for HTS and GEO satellites
- High Tracking Accuracy
- The tracking error <math>< 0.5\text{ dB (RMS)}</math> without blockage
- Optional 4G/ 5G/LTE supported modem for load balancing and bonding solutions
- Perfect Tracking Stability, even during fast movements or "S" travel
- 2-Axes stability, 3-axes tracking system
- Fast Sheltering Recovery Time Blockage <math>< 5\text{min}</math>, recovery <math>< 3\text{s}</math>
- Modular design, simple interface specification
- Convenient fault diagnosis and maintenance





GENERAL SPECIFICATIONS

Aperture
Reflector material
Antenna form
Power supply of system
Positioning mode
Steady type

POMA-40

0.40m
Carbon fiber
Circular symmetrical reflector and cap feed
DC 18-32V
GPS+BD
2-axes for stability, 3-axes for tracking

RF CHARACTERISTIC

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

Ku-Band 2 ports, Linear polarized Feed

13.75 ~14.50
10.70 ~ 12.75
H/V Linear
33.5+20lg(f/14.0)
32.3+20lg(f/12.25)
9,1
35 (axis)
-
85
30
44.5 (16W BUC)
ITU-R S.580-6 and ITU-R S.465-6

Ka-Band 2 ports, circular polarized Feed

29.0 ~ 30.0
18.7~20.2
LHCP/RHCP
39.5+20lg(f/29.4)
36.5+20lg(f/19.6)
12.3
1.5
85
30
48.5 (10W BUC)

MECHANICAL SPECIFICATIONS

AZ Motion Range
EL Motion Range
POL Motion Range
AZ Revolution
EL Revolution
AZ Acceleration
EL Revolution
Pointing Accuracy
Initial Acquisition Time
Blockage Recovery Time
Weight of Product
Antenna Platform Dimension

POMA-40

360° continuous rotation without limit
-5°-100°
± 110° / ± 90° (Ka Band)
100°/s
100°/s
200°/s ²
200°/s ²
≤0.2° (R.M.S)
≤ 2min
≤3s (cover for 5 minutes)
≤11.5Kg(including antenna system,40W Ku band Transceiver and IQ200 modem)
≤10.5Kg(including antenna system, 10W Ka-band Transceiver and IQ200 modem)
≤18Kg(including Radome)
Φ610×427mm (Dx H)

ENVIRONMENTAL SPECIFICATIONS

Working temperature
Storage temperature
Protection grade
Working humidity

POMA-40

-40°C-+55°C
-55°C-+70°C
IP65(Including Radome)
0%-98%

Specifications are subject to change.

