



STANDARD
MIL-STD
810

STANDARD
MIL-STD
188-164C

STANDARD
MIL-STD
461

Size:

0.35m, 0.45m, 0.60m

POMA SERIES

The Compact SOTM Solution for Mobile Missions

The POMA Series is a family of compact SATCOM-On-The-Move (SOTM) antenna systems for land platforms. Delivering seamless, real-time Ku- and Ka-band satellite connectivity for mission-critical voice, video, and data, POMA antennas keep mobile command, emergency response, and broadcast teams connected from any vehicle, on any terrain.

Advanced Engineering in a Minimal Footprint

Brushless DC servo motors with a precision gear train provide accurate, low-backlash pointing, while the cap-type feed delivers high efficiency and low sidelobes. All models support dual-band Ku/Ka operation with no hardware change, maximizing versatility and performance in an ultra-compact form factor.

Autonomous, Secure, and Simple Operation

POMA antennas are fully self-contained and do not depend on GPS for tracking: advanced beacon tracking continuously corrects gyro drift, making them suitable for GPS-denied environments. After a one-time entry of the platform position, the system acquires and tracks the satellite fully automatically while on the move.

Key Features

- Low-profile, lightweight design for vehicle roof mounting
- 3-axis gyro-stabilized positioner with brushless DC servo motors
- Integrated beacon tracking receiver – GPS-independent, operates in GPS-denied environments
- Multi-orbit support: GEO, MEO, LEO
- Initial acquisition < 2 min; re-acquisition < 3 s after blockage
- Stable tracking during high-dynamic manoeuvres
- Seamless satellite switching while in motion
- Modem-agnostic, OpenAMIP support
- Fully integrated BUC, LNB and ACU in a single unit
- Optional 4G/5G/LTE modem for load balancing and bonding



GENERAL SPECIFICATIONS

Reflector Diameter	0.35m	0.45m	0.60m
Stabilization Platform	3-Axes	3-Axes	3-Axes
Power Supply	18/36 VDC or 220V/AC 300W	18/36 VDC or 220V/AC 300W	18/36 VDC or 220V/AC 300W
Signal Tracking Accuracy	<0.2° (R.M.S)	<0.2° (R.M.S)	<0.2° (R.M.S)
Blockage recovery time	≤3s (blockage 20min)	≤3s (blockage 20min)	≤3s (blockage 20min)
Initial Acquisition Time	≤2min		
Compliance	Compliant with ITU-R S.465-6, ITU-R S.728-1 (Ku) / S.524-9 (Ka)		

RF CHARACTERISTIC

POMA-35

Frequency (GHz) Tx	13.75~14.50	27.50~31.00
Frequency (GHz) Rx	10.70~12.75	17.70~21.20
Antenna Gain @ Midband (±0.2 dBi)Tx	32.40	37.50
Antenna Gain @ Midband (±0.2 dBi)Rx	31.20	34.00
Cross-Polar Isolation	>30dB	>30dB

Ku-Band

Ka-Band

RF CHARACTERISTIC

POMA-45

Frequency (GHz) Tx	13.75~14.50	27.50~31.00
Frequency (GHz) Rx	10.70~12.75	17.70~21.20
Antenna Gain @ Midband (±0.2 dBi)Tx	33.80	39.20
Antenna Gain @ Midband (±0.2 dBi)Rx	32.60	35.70
Cross-Polar Isolation	>30dB	>30dB

Ku-Band

Ka-Band

RF CHARACTERISTIC

POMA-60

Frequency (GHz) Tx	13.75~14.50	27.50~31.00
Frequency (GHz) Rx	10.70~12.75	17.70~21.20
Antenna Gain @ Midband (±0.2 dBi)Tx	36.70	42.70
Antenna Gain @ Midband (±0.2 dBi)Rx	35.40	38.90
Cross-Polar Isolation	>30dB	>30dB

Ku-Band

Ka-Band

MECHANICAL SPECIFICATIONS

Motion Range	360° continuous	-15° - 110°	±90° (Ku)
Antenna Speed	200°/s	200°/s	
Antenna Acceleration	500°/s²	500°/s²	

Azimuth

Elevation

Polarization

ENVIRONMENTAL SPECIFICATIONS

Temperature Range Operational	-55 ~ +70°C
Temperature Range Survival	-55 ~ +85°C
Protection	IP65
Vehicle Speed	Up to 130 km/h (full performance)
Wind Load	200 km/h with radome (combined vehicle + headwind)

POMA SERIES

Specifications are subject to change.

