



PPA-SOTM

Mission-Ready Performance

Engineered for mission-critical users, the PPA-SOTM delivers exceptional bandwidth and unwavering reliability. Its compact, rugged design ensures low power consumption and effortless installation, providing seamless satellite connectivity wherever the mission takes you.

Advanced Electronic Architecture

Featuring fully electronic ESA with no moving parts, our antennas offer unmatched durability. The modem-agnostic design provides universal access to GEO, MEO, and LEO networks through a single antenna. Rapid electronic beam steering ensures superior speed and agility, making it ideal for LEO tracking and mobile platforms. Integrated radomes eliminate drag and RF loss while reducing costs.

Scalable & Future-Ready

Built on innovative subarray architecture, our modular design allows independent optimization of transmit and receive sizes. This scalable approach maximizes performance while enabling high-volume production and fast deployment, ensuring operational readiness without compromise.

Key Features

- Available in Ku and Ka Band
- Optimised Performance
- Seamless Connectivity
- Rugged Reliability
- Simplified Installation
- Flexible Network Integration
- Rapid Deployment
- SAR System Compatibility; fully compatible with GNSS, including Galileo, Glonass, and GPS
- Enhanced Accuracy
- Low Maintenance



GENERAL SPECIFICATIONS

	Ku-Band	Ka-Band
Power Consumption	≤380W	≤400W
Antenna Type	Metamaterial Lens Phased Array Antenna	
ACU	External ACU	
Modem	External Modem	
Power supply	220V AC/24V DC	

RF CHARACTERISTIC

	Ku-Band	Ka-Band
Frequency (GHz) Tx	13.75 ~14.50	27.50~31.00
Frequency (GHz) Rx	10.70 ~12.75	17.70~21.20
Polarisation	Linear (H/V)	RHCP/LHCP (Co-pol/cross-pol)
G/T (dB/K)	>10@12.5GHz	≥10@20GHz
EIRP (dBW)	>47@14.5GHz	>47@29.5GHz

MECHANICAL SPECIFICATIONS

	Azimuth	Elevation
Tracking Range	0° ~ 360°	25° ~ 85°
Locking Time	≤120s	
Tracking Accuracy	≤0.2° RMS	
Port	Composite aviation connector for IF, power and control	
Weight	≤48kg	
Dimensions	990×960×130mm (LxWxH)	

ENVIRONMENTAL SPECIFICATIONS

	PPA-SOTM
Temperature Range Operational	-40°C~60°C
Protection Grade	IP65

Specifications are subject to change.