Satellite Solutions by Space42 Empowering Operations with Al-Driven Space Technologies



IPNFOM -**Portable Data Terminal Military Variant**

The IP NEO M is a compact, military-grade Portable L-Band Satellite Terminal, designed for tactical communications in extreme environments.

This ultra-rugged terminal withstands sand, dust, rain, and temperature extremes. It delivers high-speed broadband and voice communications over the next-generation Thuraya 4-NGS satellite network, ensuring secure, real-time communication even in remote conflict zones.



- Disaster recovery & emergency response
- Remote government operations
- Law enforcement & security teams support

- Military & Defense
- Border Protection & Security Agencies
- **Emergency & Disaster Response**

Technical specification	
Data speeds	Up to 1 Mbps on Thuraya 4-NGS (higher speeds vs. legacy models).
Power options	Battery-powered for extreme portability.
Durability	IP68-rated; MIL-STD-810G-certified for sand, dust, rain, and shock resistance.
Network Compatibility	Thuraya 3,2, and 4-NGS satellite systems.
Security	Encrypted voice and data transmission with integrated firewall protection
User-Friendly	Smartphone integration via Thuraya Connect App (iOS & Android).



IP NEO C – Portable Data Terminal Commercial Variant

The IP NEO C is a Commercial Off-The-Shelf (COTS) Portable L-Band Satellite Terminal, designed for businesses and government agencies requiring high-speed, lightweight, and cost-effective satellite connectivity. Whether it's field research, crisis communications, or global enterprise operations, IP NEO C delivers reliable broadband connectivity in remote locations—without the need for complex setup.



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Use Cases for Government Officials & Policymakers

- Disaster recovery & emergency response
- Remote government operations
- Law enforcement & security teams support

- Government Agencies & Emergency Services
- Energy, Oil & Gas, and Mining
- NGOs & Humanitarian Organizations

Technical specification	
Data speeds	Up to 444 kbps (legacy satellites) and 1 Mbps (Thuraya 4-NGS).
Power options	Battery-powered for field operations.
Durability	IP55-rated ruggedized casing; shockproof and dust-resistant.
Network Compatibility	Thuraya 3,2, and 4-NGS satellite systems.
User-Friendly	App-based control via Thuraya Connect App (Android & iOS).
Interfaces	Ethernet, Wi-Fi hotspot, and PoE (Power-over-Ethernet) compatibility.

Commander NEO -**Vehicular/CoTM Terminal Military Variant**

Meet the Commander NEO—a game-changing vehicular L-Band satellite terminal designed to keep you connected anywhere, anytime. Whether you're in a remote desert, navigating urban security operations, or engaged in military missions, this ultra-compact, rugged, and MIL-certified communication hub delivers high-speed broadband on the move.



☆ Use Cases for Military & Defense

- Tactical command & control (c2)
- ISR (intelligence, surveillance & reconnaissance)
- Special forces & covert operations
- Military logistics & convoy support



Use Cases for Government Officials & Policymakers

- Emergency response & disaster management
- Border & national security
- Law enforcement & homeland security
- Seamless inter-agency communications

- Defense & Military
- **Government Agencies**
- Law Enforcement
- **Emergency Services**
- **Energy & Infrastructure**

Technical specification	
Compact & Lightweight	Weighs only 3.9 kg with a sleek 321mm diameter design
No Moving Parts	Beam-switching antenna ensures durability & reliability
High-Speed Data	Up to 1 Mbps on Thuraya 4-NGS / 444 kbps on legacy satellites
MIL-STD Certified	Built to military standards MIL-STD-810 & MIL-STD-461
Extreme Weather Resistant	Fully IP68-rated (dust & waterproof, submersible)
Global Navigation Support	Works with GPS, Galileo, Beidou & Glonass
Versatile Power & Connectivity	PoE 802.3bt, 32-10VDC input, hybrid Ethernet cable

Mobile Gateway (MG) M NEO – PTT and Data Mobile Gateway Military Variant

Meet Mobile Gateway M, the ultimate satellite communication solution designed for seamless, uninterrupted connectivity. Whether you're operating in remote areas, or in mission-critical scenarios, this compact and highly adaptable gateway ensures secure voice, data, and broadband services. With cutting-edge Thuraya 4-NGS technology, any location is transformed into a high-speed satellite communication hub.





Use Cases for Military & Defense

- Critical communication support and connectivity
- Command and control, field operations, and intelligence gathering.
- Encrypted connectivity and situational awareness
- Rapid deployment in challenging environments



Use Cases for Government Officials & Policymakers

- Remote area operational connectivity
- Emergency response and disaster management
- Real-time intelligence gathering
- Intergovernmental coordination

- Defense & Military
- Government & Emergency Response
- Oil & Gas
- Media & Broadcasting
- Maritime & Aviation

Technical specification	
Network	Thuraya 4-NGS Satellite System
Connectivity	High-speed broadband (1 Mbps+), VoIP, and encrypted data transmission
Antenna	Electronically steered, no moving parts, auto-tracking
GNSS Integration	Supports GPS, Glonass, Beidou, and Galileo for precise positioning
Durability	IP68-rated, built to withstand extreme maritime conditions
Installation	Compact, lightweight, and easy to deploy with Power over Ethernet (PoE)
Security	Advanced encryption protocols for secure military and gov communications



Rotary Wing Aero Terminal – L-Band Satellite Terminal

Introducing the Rotary Wing (Helo) L-Band Satellite Terminal T420—a compact, high-performance antenna system designed specifically for rotary-wing aircraft. It ensures reliable, secure, and real-time communication, enhancing mission-critical operations with seamless connectivity.



- Intelligence gathering, with secure transmission of reconnaissance data from airborne platforms
- Tactical operations, supporting coordinated military missions
- Search and rescue, enhancing situational awareness during critical SAR missions

Use Cases for Government Officials & Policymakers

- Disaster response, providing real-time aerial data for effective emergency management
- Border surveillance
- Environmental monitoring, supporting data collection for climate and resource tracking

- Defense & Military
- Government & Homeland Security
- **Environmental Agencies**
- **Emergency Services**

Technical specification	
Frequency Band	L-Band
Design	Optimized for rotary-wing aircraft with through-the-blade communication capability
Data Rate	Supports high-speed data transmission for real-time applications
Durability	Built to withstand harsh airborne environments and rotorcraft dynamics.
Integration	Seamless integration with existing avionics and communication systems

High-Altitude Platform Station HAPS

Imagine a satellite-like capability, with the flexibility of an aircraft. That's what HAPS delivers—a solar-powered, high-altitude aerial platform designed to provide unparalleled connectivity, surveillance, and intelligence gathering from the stratosphere (up to 20 km altitude).

HAPS offers 5G connectivity, real-time Earth observation, and secure radio frequency sensing with higher endurance, precision, and responsiveness than UAVs.



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Use Cases for Military & Defense

- Battlefield awareness through live-streaming high-resolution imagery and video
- Secure military communications
- Electronic warfare and signal intelligence (SIGINT)
- Maritime and border security

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Use Cases for Government Officials & Policymakers

- Nationwide 5G and IoT connectivity
- Disaster management and emergency response
- Environmental and border surveillance

- Defense & Military
- Government & Homeland Security
- Telecommunications
- Environmental Monitoring
- Oil & Gas

Technical specification	
Altitude Range	Operates in the stratosphere (up to 20 km)
Endurance	Extended flight time (multiple weeks to months per deployment)
Capabilities	5G connectivity, Earth observation, RF sensing, real-time ISR
Flight Control	Autonomous navigation with real-time ground control override
Design	Flexible solar-powered aircraft with advanced maneuverability
Security	Encrypted communications for secure military and government operations
Comparisons	- More maneuverable than satellites - More persistent & higher coverage than UAVs - Lower latency & higher image resolution than traditional space-based solutions

SCT01 – Airborne Ka-Band Satellite Terminal

Meet the SCT01, a compact Ka-band SATCOM-on-the-Move (SOTM) terminal engineered for manned and unmanned aerial platforms. Designed for high-speed, secure communications, it delivers real-time data, ISR capabilities, and military-grade encryption in airborne operations. With advanced DVB-S2 waveforms and AES-256 encryption, it ensures uninterrupted, high-bandwidth connectivity in dynamic environments.



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Use Cases for Military & Defense

- ISR and reconnaissance, supports real-time aerial surveillance and intelligence gathering
- Tactical UAV operations with reliable SATCOM for drones
- Secure military communications

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Use Cases for Government Officials & Policymakers

- Disaster response with rapid aerial communication during crises
- Nationwide connectivity, expanding government network coverage for airborne operations.
- Secure data transmission with encrypted, real-time data sharing for public safety and border security.

- Defense & Military
- Government & Homeland Security
- Aerospace & UAV Operations
- Emergency & Disaster Response

Technical specification	
Network	Ka-Band SATCOM
Encryption	AES-256 secure data transmission
Waveform	DVB-S2 compliant
Size & Weight	12" reflector, ≤ 13 kg total weight
Data Rate	Up to 10 Mbps
Interfaces	1 Gbps Ethernet, RS-232, RS-485, CAN BUS, HD-SDI video
Power Consumption	≤ 500 W (Terminal) / Max 1200W (Interface)
Operating Temperature	-40°C to +70°C (terminal), -60°C to +70°C (modem)
Standards Compliance	MIL-STD-461, MIL-STD-464, MIL-STD-810

Orion NFO -**Maritime Data Terminal**

Stay connected at sea like never before with the T260 Orion NEO, a next-generation L-band maritime satellite terminal designed for unparalleled connectivity.

Whether navigating through open waters, conducting offshore operations, or managing naval missions, this compact and robust solution ensures high-speed data and voice communication in the most challenging environments, featuring auto-tracking technology with no moving parts.



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Use Cases for Military & Defense

- Encrypted, high-speed connectivity for naval defense operations.
- Fleet-wide command, UAV control, and intelligence gathering.
- Uninterrupted performance in rough seas.
- Mission ready vessel capacity

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Use Cases for Government Officials & Policymakers

- Real-time voice & data exchange
- Security enforcement and environmental monitoring at sea
- Accurate vessel location in international waters
- Reliable performance in harsh marine conditions

- **Defense & Naval Operations**
- Government & Maritime Security
- Commercial Shipping & Logistics
- Oil & Gas Offshore Operations
- Fisheries & Marine Research

Technical specification	
Network	Thuraya 4-NGS Satellite System
Connectivity	High-speed broadband (1 Mbps+), VoIP, and encrypted data transmission
Antenna	Electronically steered, no moving parts, auto-tracking
GNSS Integration	Supports GPS, Glonass, Beidou, and Galileo for precise positioning
Durability	IP68-rated, built to withstand extreme maritime conditions
Installation	Compact, lightweight, and easy to deploy with Power over Ethernet (PoE)
Security	Advanced encryption protocols for secure military and gov communications

UAV Aero Terminal – L-Band Satellite Terminal

The UAV Aero L-Band Satellite Terminal T220 is a lightweight, high-performance SATCOM solution built for small tactical UAVs. Designed for secure, real-time communication, it ensures uninterrupted data transfer, mission-critical connectivity, and beyond-line-of-sight (BLOS) capabilities. Its compact, low-power design makes it ideal for long-endurance UAV operations in defense, security, and intelligence missions.



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Use Cases for Military & Defense

- Reconnaissance and ISR, with real-time data for intelligence and battlefield awareness
- Tactical UAV operations, extending UAV capabilities with SATCOM beyond radio range
- Special forces missions

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Use Cases for Government Officials & Policymakers

- Disaster relief coordination
- Border surveillance
- Environmental monitoring, supporting climate and resource tracking

- Defense & Military
- Government & Homeland Security
- Aerospace & UAV Development
- Environmental & Infrastructure Monitoring

Technical specification	
Network	L-Band SATCOM (Thuraya UAV 220)
Size	157x241x65 mm
Weight	2 kg
Integration	Optimized for small tactical UAVs
Connectivity	Secure IP-based data transmission for real-time communications
BLOS Capability	Extends UAV range beyond radio coverage
Power Efficiency	Low power consumption for long-endurance flights

Fixed Wing Aero Terminal – L-Band Satellite Terminal

Introducing the Fixed Wing Aero L-Band Satellite Terminal T320—a compact, high-performance antenna system designed for fixed-wing aircraft. It ensures reliable, secure, and real-time communication, enhancing mission-critical operations with seamless connectivity.



☐ Use Cases for Military & Defense

- Intelligence gathering, with secure transmission of reconnaissance data from airborne platforms
- Tactical operations, supporting coordinated military missions
- Unmanned aerial systems (UAS)

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Use Cases for Government Officials & Policymakers

- Disaster response, providing real-time aerial data for effective emergency management
- Border surveillance
- Environmental monitoring, supporting data collection for climate and resource tracking

- Defense & Military
- Government & Homeland Security
- Aerospace & UAV Operations
- **Environmental Monitoring**

Technical specification	
Frequency Band	L-Band
Data Rate	Up to 432 kbps
Antenna Type	Low-profile, mechanically steered
Dimensions	Approximately 12.5 inches in diameter
Weight	Around 4.5 kg
Power Consumption	Approximately 28 Watts
Operating Temperature	-40°C to +55°C
Compliance	Meets DO-160G environmental standards



Aero L – Band Satellite Terminal SDU

Introducing the Aero L-Band Satellite Terminal SDU—a compact, high-performance satellite data unit designed for seamless and secure airborne communications. Ideal for both fixed-wing and rotary aircraft, it ensures reliable connectivity for mission-critical operations.



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Use Cases for Military & Defense

- Intelligence gathering with secure transmission of reconnaissance data
- Tactical operations support for coordinated military maneuvers
- Unmanned aerial systems (UAS), providing reliable SATCOM links for UAV missions



Use Cases for Government Officials & Policymakers

- Disaster management, helping coordinate emergency responses in real-time
- Border surveillance
- Public safety, facilitating secure communication channels

- Aviation
- Emergency Services
- Oil & Gas
- Maritime Patrol

Technical specification	
Dimensions	Approximately 58 x 194 x 320/345 mm
Weight	Around 3.5 kg
Mounting Options	Available in ARINC 600 format (2MCU) for fixed-wing aircraft and flange mount for rotary platforms
Environmental Durability	Meets stringent aviation communication standards for both fixed and rotary-wing aircraft
Antenna Compatibility	Designed to work with high-gain antennas like the TH-HGA-6000, suitable for various aircraft types
Additional Features	Future releases to include embedded data encryption and dual-channel configurations



Aero L -**Band Satellite Terminal HLD**

Introducing the Aero L-Band Satellite Terminal HLD a high-performance High Power/Low Noise Amplifier designed to seamlessly connect your aircraft's Satellite Data Unit (SDU) with a high-gain antenna. This integration ensures robust, secure, and real-time communication capabilities for both fixed-wing and rotary-wing aircraft.



Use Cases for Military & Defense

- Intelligence gathering with secure transmission of reconnaissance data
- Tactical operations, supporting coordinated military missions
- Search and rescue, enhancing situational awareness during critical SAR missions

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Use Cases for Government Officials & Policymakers

- Disaster response, providing real-time aerial data for effective emergency management
- Border surveillance
- Environmental monitoring, supporting data collection for climate and resource tracking

- Defense & Military
- Government & Homeland Security
- **Environmental Agencies**
- **Emergency Services**

Technical specification	
Functionality	Acts as a High Power Amplifier during transmission and a Low Noise Amplifier during reception.
Integration	Seamlessly connects the SDU with the high-gain antenna, reducing system weight and complexity.
Compatibility	Designed for both fixed-wing and rotary-wing aircraft, including those with stringent vibration profiles
Applications	Supports phone calls, email, web browsing, and VPN over satellite communication links.



IP Handset – Next Generation Broadband Product

Introducing the Next Generation Broadband IP Handset—a cutting-edge communication device designed to deliver crystal-clear voice quality and seamless connectivity over broadband networks. With its sleek design and user-friendly interface, this handset is perfect for modern communication needs.





Use Cases for Military & Defense

- Field operations
- Command centers, ensuring secure and clear directives to units
- Training exercises enhacement



Use Cases for Government Officials & Policymakers

- Disaster response, facilitating real-time communication during emergencies
- Remote collaboration, enabling secure discussions among dispersed teams
 - Public announcements dissemination

- Government & Public Safety
- Defense & Military
- Healthcare
- Corporate Enterprises

Technical specification	
Connectivity	Supports high-speed broadband networks.
Audio Quality	High-definition voice clarity.
Display	Intuitive interface with a clear display.
Security	Advanced encryption for secure communications.
Compatibility	Integrates seamlessly with existing communication systems.

GCU-**Thuraya Tactical UHF Converter**

Introducing the Thuraya Tactical UHF Converter GCU a lightweight, low-power solution that seamlessly connects existing tactical VHF/UHF radios to Thuraya's satellite network. This integration enables secure, beyond-line-of-sight (BLOS) communications with minimal delay, ensuring reliable connectivity in remote or obstructed environments.



- Tactical Operations: Ensures secure, BLOS communication for units operating in challenging terrains.
- Joint Missions: Provides interoperability between different branches and allied forces.
- Covert Surveillance: Maintains secure communication channels during intelligence-gathering missions.

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Use Cases for Government Officials & Policymakers

- Disaster response, facilitating real-time communication between multiple teams
- Border surveillance: Enhances monitoring by providing continuous, secure communication links in remote areas.
- Public Safety Coordination: Enables seamless interoperability among various agencies during critical operations.

- Defense & Military
- **Government Agencies**
- **Emergency Services**
- Law Enforcement

Technical specification	
Connectivity	Integrates existing VHF/UHF radios with Thuraya's satellite network via a single-hop link, ensuring minimal delay.
Power Efficiency	Designed with low power consumption for extended field operations.
Mobility	Lightweight and suitable for communications on the move or at halt.
Security	Provides encrypted, secure communication channels for sensitive operations.
Deployment Options	Available in four packages—ManPack, Aeronautical, Marine, and Vehicular — to suit various operational scenarios.

Thuraya Tactical UHF Converter TTAC -Vehicular

When it comes to mission-critical communications, having seamless interoperability between UHF radios and satellite networks can be the deciding factor. The Thuraya Tactical UHF Converter (TTAC-Vehicular) is designed to ensure uninterrupted, secure, and real-time connectivity. This rugged, vehicle-mounted unit enables seamless communication between UHF radios and Thuraya's satellite network, extending coverage beyond line-of-sight (BLOS).





Use Cases for Military & Defense

- Beyond-line-of-sight (BLOS) communication
- Seamless, encrypted UHF-to-satellite communications for joint military operations
- Secure and covert communication for intelligence gathering, reconnaissance, and rapid-response missions

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Use Cases for Government Officials & Policymakers

- Seamless connectivity
- Disaster response with real-time coordination
- Border security interoperability
- Encrypted communications for convoys and high-profile missions

- Defense & Military
- Government & Emergency Response
- Border Security & Law Enforcement
- Energy & Critical Infrastructure

Technical specification	
Network Support	Thuraya's L-band satellite network
Interoperability	Bridges UHF radio communication with satellite connectivity
Vehicle-Mounted	Designed for on-the-move operations in rugged environments
Encryption & Security	Supports military-grade encryption for secure transmissions
BLOS Communication	Extends radio network coverage beyond line-of-sight (BLOS)
Rugged & Reliable	Built for harsh environments, ensuring 7/24 connectivity

TTAC – Manpack

Introducing the Thuraya Tactical UHF Converter TTAC-Mapack—a lightweight, low-power solution that seamlessly integrates existing tactical VHF/UHF radios with Thuraya's satellite network. This integration enables secure, beyond-line-of-sight (BLOS) communications with minimal delay, ensuring reliable connectivity in remote or obstructed environments.



Use Cases for Military & Defense

- Tactical operations, ensuring secure, BLOS communication for units operating in challenging terrains
- Joint missions interoperability between different branches and allied forces
- Covert surveillance, maintaining secure communication channels during intelligence-gathering missions

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Use Cases for Government Officials & Policymakers

- Disaster response, facilitating real-time communication between multiple teams
- Border surveillance
- Public safety coordination, enabeling interoperability among various agencies during critical operations

- Defense & Military
- Government Agencies
- Emergency Services
- Law Enforcement

Technical specification	
Connectivity	Integrates existing VHF/UHF radios with Thuraya's satellite network via a single-hop link, ensuring minimal delay.
Power Efficiency	Designed with low power consumption for extended field operations.
Mobility	Lightweight and suitable for communications on the move or at halt.
Security	Provides encrypted, secure communication channels for sensitive operations.
Deployment Options	Available in four packages—ManPack, Aeronautical, Marine, and Vehicular — to suit various operational scenarios.

TTAC -**Maritime**

The TTAC - Maritime is a tactical UHF-to-satellite converter designed for naval operations. It enables beyond-line-of-sight (BLOS) communications for maritime forces, ensuring secure and real-time connectivity across vast oceanic territories. With rugged durability and encrypted data transmission, it is ideal for naval intelligence and coordinated fleet operations.



- Naval fleet coordination: Ensures encrypted communication between ships and command centers.
- Amphibious operations: Reliable SATCOM for integrated land-sea missions.
- Submarine communications: Extends connectivity to surface units.

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Use Cases for Government Officials & Policymakers

- Coastal security: Enables seamless coordination for border and maritime law enforcement.
- Disaster relief: Supports search and rescue efforts with satellite connectivity.
- Fisheries protection: Provides government agencies with real-time tracking and monitoring.

- Naval & Maritime Defense
- Government & Homeland Security
- Search & Rescue Operations

Technical specification	
Network Support	Thuraya's L-band satellite network
BLOS Communication	Extends UHF radios beyond terrestrial limits
Encryption & Security	Military-grade encryption for secure transmissions
Durability	Designed for harsh maritime conditions

TTAC -**Aeronautical**

The TTAC - Aeronautical is a high-performance UHF-to-satellite communication system designed for aircraft operations. It enables secure, real-time connectivity between airborne units and ground forces, ensuring mission-critical coordination for military, government, and ISR operations.



Use Cases for Military & Defense

- Aerial reconnaissance: Secure ISR data transmission.
- Tactical air support: Seamless coordination between air and ground units.
- Combat search & rescue: Ensures reliable comms in rescue operations.

🟛 Use Cases for Government

- Airborne border Patrol: Enhances real-time situational awareness.
- Disaster relief operations: Supports aerial coordination during emergencies.
- VIP Security: Ensures encrypted communication for high-profile officials.

- Defense & Military
- Homeland Security
- **Emergency & Disaster Relief**

Technical specification	
Network Support	Thuraya's L-band satellite network
Aircraft Compatibility	Fixed-wing and rotary aircraft
Encryption	AES-256 for military-grade security
Weight & Size	Compact, lightweight design

LTS – Personnel Handheld Satellite Communication and Tracking Device

The LTS - Personnel is a rugged, handheld satellite tracking and communication device, providing real-time GPS location, encrypted messaging, and emergency SOS features. Built for defense, security, and government use, it ensures reliable connectivity even in the most remote areas.



Use Cases for Military & Defense

- Special forces missions: Covert tracking and encrypted messaging.
- Field operations: Tactical teams remain connected beyond radio coverage.
- Reconnaissance: Secure situational awareness and communication.

🛍 Use Cases for Government

- VIP protection: Tracks and communicates securely in remote locations.
- Disaster response teams: Real-time tracking and emergency coordination.
- Border security: Personnel tracking and secure voice/data transmission.

- Defense & Military
- Homeland Security
- Government & Homeland Security

Technical specification	
Network Support	Thuraya's L-band satellite network
Encryption	Secure AES-256 data protection
Size & Weight	Compact and lightweight for portability
Battery Life	Long-lasting operation for field deployment

LTS-**Maritime**

The LTS - Maritime is an advanced satellite tracking device for naval fleets, commercial shipping, and fisheries. It provides real-time location tracking, emergency SOS signaling, and encrypted data transmission, ensuring seamless maritime security and compliance.



Use Cases for Military & Defense

- Naval fleet tracking: Secure positioning and encrypted communication.
- Anti-piracy operations: Enhances maritime domain awareness.
- Covert missions: Real-time intelligence for tactical units.

🟛 Use Cases for Government

- Maritime surveillance: Tracks vessels in real time for security.
- Regulatory compliance: Monitors ships for legal and safety compliance.
- Emergency response: Assists in rapid incident response at sea.

- Naval & Maritime Defense
- Commercial Shipping & Logistics
- Government & Homeland Securit

Technical specification	
Network Support	Global L-band satellite tracking
Encryption	AES-256 for military security
Durability	Waterproof, ruggedized for maritime conditions
Battery Life	Extended duration for long voyages



LTS -Vehicular

Introducing the Vehicular Satellite Tracking Device LTS - Vehicular: your go-to solution for real-time vehicle monitoring. This compact device offers precise GPS tracking, geofencing, and comprehensive fleet management features, ensuring your vehicles are always within reach.



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Use Cases for Military & Defense

- Track and coordinate military vehicle movements securely.
- Ensure timely maintenance with automated alerts for optimal readiness.

🛍 Use Cases for Government

- Enhance public transportation efficiency with real-time vehicle tracking.
- Monitor and manage government fleet utilization effectively.

- Logistics and Transportation
- Public Safety and Emergency Services
- Construction and Heavy Equipment Management
- Public Transportation Systems

Technical specification	
Dimensions & Weight	Compact design for easy installation; lightweight for minimal impact on vehicle performance.
Power Supply	Wide voltage support (e.g., 80-6V) with overvoltage and reverse voltage protection.
Connectivity	Supports GPS, 4G LTE, Bluetooth 5.0, and Wi-Fi for versatile communication options.
Features	Real-time tracking with customizable update intervals. Geofencing capabilities to define virtual boundaries. Historical route playback for trip analysis. Multiple alert options, including unauthorized use and maintenance reminders.
Environmental Resistance	Durable construction with IP67 rating for water and dust resistance.

UGV – Unmanned Ground Vehicle

Introducing the Unmanned Ground Vehicle (UGV): a versatile, autonomous land robot designed to perform tasks without direct human intervention. UGVs enhance operational efficiency and safety across various sectors by handling hazardous or repetitive duties.





Use Cases for Military & Defense

- Reconnaissance and surveillance missions
- Explosive ordnance disposal (EOD) operations
- Logistics support in hazardous zones

(m) Use Cases for Government

- Environmental monitoring and data collection
- Infrastructure inspection and maintenance
- Disaster response and management

- Defense and Security
- Emergency Services
- Environmental Monitoring
- Infrastructure Management
- Agriculture

Technical specification	
Dimensions & Weight	1442mm (W) × 1234mm (H) × 2009mm (L), 426 kg, 114mm ground clearance, 300 kg payload, 25° slope handling
Performance	10-5 km/h, 8-hour autonomy, -10°C to 110°C, LiFePO48 4V battery, 4-hour charge
Sensors	100m range, ±3 cm accuracy, 75° H-FOV, 45° V-FOV, CAN (250 kbit/s - 1000 kbit/s)
Motor & Power	3KW brushless DC, 90 Nm torque, 48V, 30-80 km/h, secondary 1KW motor (10 Nm @ 20 rad/sec)
Imaging	2.811" CMOS, 2.0 MP, 30x zoom (4.5-135mm), 80-40m IR LED, Digital WDR
Processing	ARM Cortex M4/M7, Safe RTDS OS, 8-core Cortex-A78AE, 200 TOPS AI, 32GB LPDDR4
Connectivity	CAN, LIN, UART, I2C, SPI, USB, RS232, RS422, up to 2 kHz output

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