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Thuraya T2M-Dual

Mobility. Versatility. Reliability. Efficiency.

This is Thuraya T2M-Dual

An M2M solution, enabling the collection of location information as well as data from external sensors, while simultaneously gathering data from your mining vehicles or heavy equipment CANBus. Offering the best in security and connectivity when it comes to tracking and monitoring assets, with built-in navigation systems, it couldn't be easier to keep track of all your assets. Dual-mode means the T2M-dual auto-switches between Thuraya's satellite M2M network and partner GSM networks, allowing for constant, seamless coverage.

With its robust IoT communications and capabilities, the T2M-dual allows for smart, streamlined, and automated data capture across both satellite and GSM networks, delivering actionable data directly to you. From smart grid and smart metering applications to weather station monitoring and environmental management, the terminal offers a solution that is simple, flexible, and affordable. The ability to integrate sensors enables real-time condition monitoring of assets, including temperature, pressure, humidity, vibration, and wear, making the T2M-Dual is unrivaled in driving your operations performance and process efficiency.

Product Features

Dual use
Track fixed or mobile assets

Dual-mode coverage
Dual-mode auto-switching between Thuraya's satellite M2M network and partner GSM networks allows for seamless, always-on coverage

Choice of transmission
Unmatched choice of transmission to meet any use case communicate over 3G GSM or Satellite: Messaging, GmPRS IP Data, Circuit Switched 9.6 kbps data

Mobile fleet tracking
Track and manage vehicles and assets across borders, to ensure remote asset safety and efficiency

Operational efficiency
With the ability to gauge and continually monitor events, T2M-DUAL helps operators make smarter decisions to drive operational efficiency

Low total cost of ownership
Cost-effective data plans with a data pooling option, giving peace of mind with predictable costs

Location
Know the exact location of all your assets with built-in navigation systems supporting: GPS, Galileo, Glonass and Beidou navigation systems

OTA
Over-the-air command and control SDK and Protocol support

Built to withstand the harsh environmental conditions.

Key uses

Fleet management; Rail tracking; Oil & Gas, SCADA and Pipeline monitoring; Smart grid and smart metering applications; Security, surveillance and tracking; Weather station monitoring; Hydro and environmental management

General Specifications		
Size (mm)	133(W) x 103(L) x 39.8(H)	Unit: mm
Weight	395 g 1.35 kg	T2M – DUAL terminal Including accessories
Operating Temperature	-30 °C ~ +70 °C -20 °C ~ +60 °C	Excluding backup battery Including backup battery
Battery Capacity	3000 mAh	Li-ion
Storage Temperature	-40 °C ~ +85 °C	
Vibration	Random 5~20Hz 0.05g2/Hz, 20~150Hz: - 3dB/oct.(1.7g rms), 3-axis, 30minutes for each axis.	
Thermal Shock	-40 °C (1H) / +85 °C (1H), 1 cycle Total 24 Cylce, 48H, non-operating	
Humidity	+70 °C / 95% / 48 Hours, Operating	

Terminal Specifications			
Communication Modem	SAT 3G	Thuraya SM-2700 3G Data Modem	Support Thuraya Satellite Network Support Band I, Band V, Band VII
GNSS	Chipset TTFF	UBLOX-M8030 Cold Stat : 26sec Hot Start : 1sec	Support multi-GNSS: GPS, Beidou, Glonass, Galileo
Ingress Protection	> IP66		
Operating Voltage	+10 Vdc ~ +34 Vdc		
I/O Connector	26 Pin	Waterproof connector	
Interfaces	CANbus protocol (J1939) User programmable CAN configuration 4 Digital Input/ Output 2 Analog ADC Data Input 2 Serial RS232 Port 1-Wire Communication		

Terminal Specs		
SIM Slot	SAT: Mini SIM GSM: Micro SIM	
LED	4 LEDs	Power, SAT, GSM, GPS
Additional	DIP Switch Reset Button	Set vehicle voltage Reset terminal

Antenna		
SAT & GPS Antenna	Frequency	1525Mhz ~ 1660.5 Mhz (SAT)
	Impedance	50Ω
	Polarization	LHCP (SAT) / RHCP(GPS)
	Axial Ratio	< 4dB
	Gain	>5dBic@peak
	Size	110 (D) x 42(H)
	Connector	SAT: SMA(F), Gold color GPS: SMA(F), Silver color
	Ingress Protection	IP67
	Mounting	Magnetic Mounting Plate Mounting
3G Antenna	Type Beam Pattern Impedance	Basic: Internal Multi-Band Antenna Optional: External Multi-Band Antenna Omni-Directional 50Ω

+971 (4) 435 6800
info@cygnus.co | www.cygnus.co

THURAYA
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