EXPLORER 122

Comms-on-the-move satellite terminal for SkyTerra 1

The most important thing we build is trust

COBHAM

Remote Satellite Systems
INTERNATIONAL

Introducing the EXPLORER 122

EXPLORER 122 is the first EXPLORER terminal developed to operate over the SkyTerra 1 satellite utilizing ViaSat's low-latency, IP-based L-band Mobile Satellite Services network. It is a compact Comms-On-The-Move terminal offering reliable real-time IP data and voice connectivity, including Push-To-Talk and GPS tracking.

The lightweight one-piece design with an integrated transceiver and antenna, has no moving parts and a high IP-66 rating, making it robust and durable for use in any application.

Whether you're engaged in emergency response, humanitarian operations or fleet management, EXPLORER 122 is an easy deployable communication system you can always rely on. Simply place the antenna on the roof of your vehicle and get access to the internet and phone networks instantly.

SkyTerra 1 Coverage Map

ligado NETWORKS   **ViaSat**

System features

- Integrated transceiver and antenna

- Lightweight: Less than 4lbs

- Smallest EXPLORER COTM terminal: 9.8x5.9x2.4in (LxWxH)

- 10-30VDC power input suited vehicle installs

- Works at speeds up to 125 miles per hour

- Data speeds up to 1 mbps download and 10 kbps upload

- IP-66 rating - dust and spray proof in all directions

- Ethernet via Chogori multi-pin connector

- Wireless connectivity with 802.11 B/G

- Roof mountable with optional magnetic mounts

SkyTerra 1 Satellite

Ligado Networks provides ubiquitous coverage throughout North America over one of the most powerful L-band commercial satellites ever built.

The high-powered SkyTerra 1 satellite enables transmissions to small fixed and mobile devices by using a 22-meter reflector-based antenna—the largest satellite reflector to be put into service on a commercial satellite, bringing higher data throughputs to smaller devices.

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General Specifications

Dimensions:

H / D / L:	62 / 150 / 250 mm
	2.4 / 5.9 / 9.8 inches

Weight: < 2kg / 4.4lbs

Data Rate:

Forward:	Up to 1 mbps
Return:	10 kbps

Frequency band:	TX: 1626.5 – 1660.5 MHz
	RX: 1525.0 – 1559.0 MHz

Transmit EIRP: Up to 8dBW at Zenith

Receive G/T: -21 dB/K typical at Zenith

Link Encryption: AES-256

GNSS: GPS L1 frequency

Approvals: FCC and IC

Environmental Conditions

Temperature

Operational:	-20 to +55°C / -4 to 131°F
Transport:	-40 to +85°C / -40 to 185°F
Storage:	-40 to +85°C / -40 to 185°F

Relative humidity:	95% non-condensing
	at +45°C / +113°F

Solar Radiation: 1120W/m^{2}p per IEC-60068-2-5

Ingress Protection: IP-66 (dust and spray proof)

Wind: Speeds up to 200 km/hr

Vibration:

Operational:	Random vibration of 1.05g rms in each of three mutually per pendicular axes The spectrum is: 5 to 20 Hz: 0.02g2 /Hz
Survival:	Transportation vibe per IEC 60068-2-64, Freq: 5-200Hz, ASD: 1.0m2/s3

Shock:

Operational:	IEC 60068-2-64, 50m/s2, 11ms
Survival:	Transportation shock per IEC 60068-2-29, A = 180m/s2, t = 6mS

Interfaces

Power:	10-30VDC
	Via multi-pin connector
Ethernet:	IEEE 802.3 10/100
	Via multi-pin connector
Remote On/off:	Via multi-pin connector
Wireless:	IEEE 802.11 B/G, 2.4 GHz

Power

DC input range: 10-30VDC

Consumption:	8W max in receive mode
	48W max in transmit mode

Other features

User Interface:	Web interface
	AT Commands

Package

EXPLORER 122 integrated antenna and transceiver
Multi-pin connector
Getting started kit: Quick start guide

Product number

403706A-00500	EXPLORER 122 System

Accessories

403706A-009	Magnetic Mount Solution
403706A-050	Connection Box
403706A-055	Connection Cable
	- 6m combined Ethernet and power cable

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