

# EXPLORER MSAT-G3

Next generation MSAT Push-To-Talk

November 2016 Product Sheet

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# COBHAM



## MSAT Communication Evolved

The EXPLORER MSAT-G3 is an IP-based Push-To-Talk (PTT) radio communications system that supports Satellite/LTE/3G/LAN backhaul and Land Mobile Radio (LMR) integration to provide seamless voice communication in any situation. It is the next generation MSAT solution utilizing the power of the Ligado Networks (former LightSquared) SkyTerra-1 satellite and ViaSat's low-latency, IP-based L-band Mobile Satellite Services network.

The collaboration between Cobham, Ligado Networks and ViaSat brings to market the next-generation features that expand upon the legacy of MSAT-G2 while retaining the platform's popular flat-rate service plans.

The EXPLORER MSAT-G3 platform will allow for a broad range of new data-rich applications secured by AES-256 encryption connected to a ruggedized EXPLORER PTT terminal that supports Satellite/3G/LTE/LAN backhaul and Land Mobile Radio integration to provide seamless handover of voice calls.

## Enhanced Capabilities

EXPLORER MSAT-G3 looks and feels just like a standard LMR system, utilizing a simple PTT handset. It's just as easy to install as a standard system too. Uniquely, up to two USB cellular modems (optional) can be connected to the PTT terminal allowing for two independent cellular network connections.

In action, sophisticated routing functionality automatically switches between the available networks, dynamically selecting the most suitable one based on cost, quality and availability at any time. This all happens without user intervention, meaning they can get on and do their job, just like they have always done.

The EXPLORER MSAT-G3 solution solves many challenges faced by traditional LMR system operators:

- Coverage area is extended by combining satellite links and the existing cellular based networks.
- Automatic switching between satellite, cellular, and LAN connectivity.
- Terrestrial infrastructure costs are reduced, allowing for a higher return on investment.
- Users benefit from constant communications availability in any environment when on the move.



- Scalable from two to thousands of units.
- Compatibility with many different brands of land mobile radios.

## MSAT Interoperability

The MSAT network provides access to national and regional SMART Talk Groups which enable critical interoperable communications among homeland security officials, law enforcement, emergency responders, and public safety officials from various departments and agencies across the United States.

The EXPLORER MSAT-G3 solution meets the needs of:

- Emergency first responders and law enforcement agencies during emergencies and in disaster recovery situations.
- Mobile workers who require voice connectivity outside terrestrial network coverage for safety purposes and efficiency of operation.

The EXPLORER MSAT-G3 solution will be able to interoperate with the legacy MSAT hardware. This new EXPLORER PTT hardware will be able to work in the same SMART Talk Groups as MSAT-G2 terminals. This feature and the completed server infrastructure will be ready later this year.

# EXPLORER MSAT-G3

Next generation MSAT Push-To-Talk

The EXPLORER MSAT-G3 utilizes the power of the Ligado SkyTerra-1 satellite, combined with ViaSat L-Band Managed Satellite Network, and Cobham's industry leading Push-To-Talk technologies.

## EXPLORER hardware

The solution is based on the new EXPLORER 122 L-Band satellite terminal combined with the advanced EXPLORER PTT system from Cobham SATCOM.

- A ruggedized and easy to use digital Push-To-Talk communication solution.
- Designed to cost effectively expand and augment LMR systems.
- Built-in support for LMR devices to ensure over-the-horizon radio communication.
- Voice-over-IP technologies optimized for use under difficult satellite or terrestrial link conditions.
- Redundant connectivity by automatic and seamless routing between cellular LTE/3G/2G networks and SkyTerra-1.

Integrated seamlessly, these proven Cobham technologies create an advanced, highly reliable, and easy-to-use hardware platform that enables emergency services in North America to harness the power of the MSAT network to communicate effectively in any environment.

## EXPLORER 122 L-Band Satellite Terminal

EXPLORER 122 is the first EXPLORER terminal developed to operate over the Ligado SkyTerra-1 satellite network. It is a compact Comms-On-The-Move terminal offering reliable real-time IP data and voice connectivity, including PTT and tracking.

The lightweight one-piece design 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, fleet management or transportation, 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.



EXPLORER 122 Satellite Terminal



EXPLORER PTT Terminal with Handset

Subject to change without further notice.



## SkyTerra-1 Satellite

Ligado Networks provides ubiquitous coverage throughout North America over one of the most powerful commercial L-band 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 to be put into service on a commercial satellite, bringing higher data throughputs to smaller devices



SkyTerra-1 Satellite Coverage

## Mobile Satellite Service from ViaSat

ViaSat's Mobile Satellite Service (MSS) enables affordable, mission critical voice and data where you need it, augmenting cellular and Land Mobile Radio networks over our highly available, multicast network with low latency and AES256 encryption.



## EXPLORER 122 System Features

- Integrated Transceiver and Antenna
- Roof mountable with optional magnetic mounts
- Lightweight and small: Less than 4lbs and 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 1mbps download and 10 kbps upload
- IP-66 rating - dust and spray proof in all directions
- Ethernet via multi-pin connector
- Wireless connectivity with 802.11 B/G or Bluetooth 3.0



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