EXPLORER Mobile Gateway 3

Beyond Line-Of-Sight Push-To-Talk and Data Communication

COBHAM SATCOM
Connecting the future

Product Sheet

Beyond Line-Of-Sight Communication

The 3rd generation EXPLORER Mobile Gateway is an AES-256 encrypted data communications device designed for use in a vehicle. It is an advanced IP-based radio and data gateway that integrates of Land Mobile Radio (LMR) devices with satellite / LAN backhaul to provide seamless switching between available networks in any situation. It is completely radio brand agnostic and designed to expand and augment LMR systems already in use in Public Safety, Utility, Mining, and Oil & Gas.

The solution extends legacy Push-To-Talk radio capabilities to hybrid data networks such as terrestrial cellular networks, supplemented by satellite where no terrestrial network coverage is available. With no user intervention required, the system automatically routes voice and data traffic via the most reliable network available.

Enhanced Capabilities

EXPLORER Mobile Gateway 3 solves many challenges faced by traditional LMR system operators:

- Uncompromized coverage beyond line-of-sight by using satellite and existing cellular-based networks
- Seamless switching between satellite, cellular, and LAN ensures uncompromized resilient communications
- High availability to support critical communications
- Lowers expensive terrestrial infrastructure costs
- Scalable from two to thousands of units
- Compatibility with different brands of land mobile radios
- SIP integration to existing infrastructure
- 256-bit AES-CTR encryption

Cobham PRISM PTT$^+$ Service

EXPLORER Mobile Gateways are managed and configured in the Cobham Satcom managed PRISM Portal. The web-based portal ensures a simple and easy configuration of any EXPLORER Mobile Gateway, no matter its location, and provides over-the-air updates to vehicles.

The PRISM portal offers a long list of functionalities:

- Quick setup and configuration of call groups
- Preconfigured E&M (Ear&Mic) radio interfaces for existing LMR/DMR radios
- Easy duplication of configuration across EXPLORER Mobile Gateways
- User-friendly configuration of tracking and AGC
- Recording of all voice in one or more call groups
- Advanced routing configuration for critical applications

A typical vehicle installation includes a EXPLORER Mobile Gateway with an EXPLORER Control Speaker Mic connected to an on-the-move satellite terminal (such as EXPLORER 323). Up to two cellular modems can be installed, allowing for independent network connections and switching.

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- A ruggedized and easy to use digital Push-To-Talk communication solution.
- Designed to cost effectively expand and augment Land Mobile Radio 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.
- Seamless voice and data routing between bearers - WLAN, LAN, cellular and satellite networks.
- Beyond Line-Of-Sight communication - uncompromized global coverage.

Specifications

Dimensions (H / W / D):	66 / 310 / 179 mm
	2.6 / 12.2 / 7.0 inches
Weight:	1.8 kg / 4.1 lbs
Services:	
Push-To-Talk Voice:	Group call, Dispatch call
IP Service:	Seamless switching of IP Data
Approvals:	CE, GMPCS, FCC

Power

Power supply:	
Terminal:	Nominal 12-24 VDC
	Operating 10.8-31.2 VDC
Handset:	Powered by the Terminal
Power consumption:	
Max wattage:	60W
Typical use:	<10W

Environmental conditions

Temperature:	
Operational:	-25° to +55°
Storage:	-40° to +80°
Ingress Protection:	IP31

Interfaces

6 x LAN interface:	
Connector type:	RJ45 x 4, hereof PoE x 1
	Terminal block x 2
Data rate:	10/100 Mbps
API integration:	Supported
1 x Wifi interface	
Connector type:	SMA x 2
Type:	802.11b, g, n, ac
2 x USB:	
Connector type:	USB host for Cellular Modems
2 x Internal LTE Modem	
Connector type:	M2 x 2 (size 3042/3052)
	Nimbelink x 2
	SMA x 4

Product number

403667-00500	EXPLORER Mobile Gateway 3

Related Products

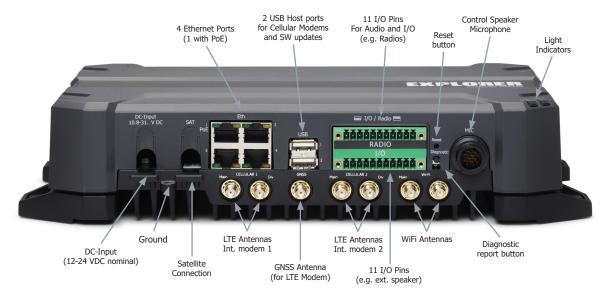|	
403723A-00506	EXPLORER 323 Terminal
406205B-00500	EXPLORER 6205 Speaker Mic (CSM)

EXPLORER Control Speaker Mic (Optional)

- On/off
- Volume
- LCD Display
  - Network status
  - Current Group
  - Connection status
  - Dimmer (backlight)
- PTT button
- Jogwheel selector
- 4 Control buttons
  - Menu Home
  - Menu Shift
  - Replay
  - Call
- Distress button on the rear

GROUP 3
CONN

- 4 Ethernet Ports (1 with PoE)
- 2 USB Host ports for Cellular Modems and SW updates
- 11 I/O Pins For Audio and I/O (e.g. Radios)
- Reset button
- Control Speaker Microphone
- Light Indicators
- DC-Input (12-24 VDC nominal)
- Ground
- Satellite Connection
- LTE Antennas Int. modem 1
- GNSS Antenna (for LTE Modem)
- LTE Antennas Int. modem 2
- 11 I/O Pins (e.g. ext. speaker)
- WiFi Antennas
- Diagnostic report button

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