

# EXPLORER 540

Dual Mode BGAN M2M & Cellular terminal

**COBHAM**

April 2020 Product Sheet

## Introducing the EXPLORER 540

As the world's first BGAN M2M terminal designed to operate on both Inmarsat BGAN (Broadband Global Area Network) and cellular 2G/3G/LTE networks, EXPLORER 540 delivers always available connectivity for critical monitoring and control applications.

The BGAN M2M service uses Inmarsat BGAN to provide a reliable, global, two-way IP data service. It is designed to connect monitoring and control applications in remote, unmanned locations, providing visibility and management of those assets. By combining BGAN M2M with cellular connectivity in the same terminal, EXPLORER 540 gives users the opportunity to choose the best carrier for any location.

## Dual Mode BGAN M2M

EXPLORER 540 is the only Inmarsat BGAN M2M terminal to offer dual mode operation, which provides unique flexibility and M2M data communication cost-control, as it ensures the most cost-effective communication service can be chosen depending on location.

Securing continuity of M2M IP data transfer, which often originates in hard to reach, remote locations, dual-mode operation and Cobham SATCOMs PRISM routing technology delivers significant failover capabilities with automatic switching between BGAN and cellular networks.

For organisations transferring critical real-time data within their M2M networks, EXPLORER 540's dual mode can provide unmatched service availability. The terminal is well suited for bespoke M2M solutions such as IP SCADA for data backhaul, asset tracking, real-time surveillance and remote telemetry.

## Designed for any environment

EXPLORER 540 is a rugged and C1D2 certified M2M terminal designed to provide reliable and secure IP data in even the harshest environments. At 20 x 20 cm and just 1.6 kg, it is the smallest and lightest BGAN M2M terminal in the market today.

The durable casing and a dust and water resistant IP66 design makes EXPLORER 540 the perfect choice for any kind of fixed installation outside or inside.



## System features

- EXPLORER 540 is BGAN M2M certified and BGAN Class 2 Type Approved for services such as BGAN Link
- Lightweight and rugged IP66 design ensures durability for outside mounting - no enclosure needed
- C1D2 certified for use in hazardous environments
- Polemount included in the package
- Simple to set up and operate
- Versatile power options with both Power over Ethernet (PoE) and 10-32 VDC input
- Two cable glands for easy installation of standard power and Ethernet cables into the back housing
- Remote management of the terminal via SMS including configuration, debugging, and access to the web interface
- The optional cellular 2G/3G/LTE Modem is an integrated part of the design
- Automatic failover between BGAN and the cellular network ensures continuous connectivity

Did you know that Inmarsat BGAN M2M...

...has no connection charge

...offers free over-the-air software upgrades

...has a 99.9% availability over the BGAN network

# EXPLORER 540

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## Specifications

### Dimensions

H / W / D: 202 / 202 / 51.8 mm  
8.0 / 8.0 / 2.0 inches  
Weight: 1.6 kg / 3.5 lbs

### Data capabilities

Standard IP: Up to 464 kbps  
Streaming IP: 32, 64, 128 kbps (Not for BGAN M2M)

### Voice capabilities (Not for BGAN M2M)

Standard voice: 4 kbps  
Premium voice: 3.1 kHz audio, 64 kbps

EIRP: 15.1 dBW ±1dB

User interface: One LED (Status), 1 Reset Button, web interface

Languages: ENG, FR, DE, ES, RU, JP and CN

Approvals: CE, FCC, IC, C-TICK, C1D2, Inmarsat Class 2 Type Approved and BGAN M2M Certified

## Environmental conditions

### Temperature

Operational (ambient): -40°C to +55°C / -40°F to +131°F  
Extended Operational: > +55°C / +131°F  
(Protective power off if internal overheating occurs - typically at +75°C / +167°F)  
Storage: -55°C to +80°C / -67°F to +176°F

Relative humidity: 95% non-condensing at 40°C/+104°F

Robustness: 0.5 m/1.64 ft drop on concrete (operational, 95% survival)

Water and dust: IP66

Hazardous Environments: C1D2 Certified

## Power

DC input range: 10.5-32 VDC Pin Connector

PoE input: PoE+ IEEE 802.3at Type 2 Class 4 via RJ45 Connector

Power consumption: Standby: 1.9W (@ 12VDC)  
3.5W (PoE)  
Transmit: 19W (typical)  
Power Save:

	@12VDC	PoE
Wake on GPIO or timer	0.1W	2.4W
Wake on LAN	0.9W	2.3W

## Interfaces

- Micro USB (For EXPLORER cellular modems)
- BGAN SIM-Card slot
- RJ45 Ethernet connector with PoE
- 8 pin terminal block for Ethernet and PoE
- 3 I/O pins
- 2 pin DC power input

## Package

- EXPLORER 540 terminal
- Polemount
- Quick Start Guide
- Multi-language webserver (ENG, FR, DE, ES, RU, JP and CN)
- Cable Glands and 1 Blanking Cap
- Tools: Torx bit for back cover and Allen key for polemount

## Accessories

- 403715A-101 EXPLORER 540 LTE Modem (US)
- 403715A-102 EXPLORER 540 LTE Modem (EMEA/APAC)
- 403715A-110 LTE Modem Extension Kit (to mount modem separately)

## Product number

- 403715A-00550 EXPLORER 540 Terminal (C1D2)

### EXPLORER LTE Modem

The optional EXPLORER 540 LTE Modem replaces the backcover of the EXPLORER 540 and fits the interface enclosure. With the modem you can connect to local cellular networks and turn EXPLORER 540 into a dual mode BGAN M2M.



  
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