inmarsat

The mobile satellite company™

M2M Services

One global 3G network. One global SIM.

In today's always-on business environment can you afford to be in the dark?

The use of machine-to-machine (M2M) technology is growing fast - and no wonder. The idea of monitoring and controlling remotely located assets is compelling. It promises new levels of efficiency, flexibility and security. In fact, the possibilities are limited only by the reach of the network.

Without a network connection there is no M2M. You cannot manage the security of your fleet outside urban centres. You cannot deploy seismic monitoring equipment where it delivers the most accurate data. You cannot guarantee the integrity of oil or gas flow across thousands of miles of unpopulated terrain.

As a result, your organisation must either compromise its operations or accept the risks of being in the dark. Yet there is an alternative.

Global M2M coverage on a single SIM
With Inmarsat M2M you can send and receive data from any device to any location - however remote - in real time. What's more, Inmarsat's global 3G service is available on one seamless, worldwide satellite network, with no roaming charges.

Think of the possibilities. You can optimise existing processes or innovate to gain competitive advantage. You can go where other businesses can't or won't, and produce efficiencies they haven't yet thought of. Best of all, you can exploit the full, revolutionary potential of M2M technology.

Close the gaps in your existing network
Our 3G satellite network extends the reach of your terrestrial network to more remote and hostile locations. It could also provide increased availability, or a secure back-up, in the event of power outages, natural disasters or seasonal overuse.

‹ BGAN M2M integrated with weather monitoring station

Satellite M2M:
the Inmarsat advantage

A single global network
One network, one price, one SIM.
No roaming charges.

High availability
Ubiquitous coverage and 99.9% network
availability so you can reach devices in even
the most remote and inhospitable locations.

Reliable connection
Resilient in extreme weather conditions.

Global opportunity
Maximise revenue by opening up regions
previously inaccessible to 3G networks.
Win contracts that require global service.

Flexible data
The demand for higher data rates and volumes
is growing. Satellite M2M solutions are scalable
from bytes to gigabytes.

Convenience
Rapidly deployable, easy to set up and
suitable for long-term unmanned deployment.

Seamless integration
Easy to integrate. No special software
required. Interfacing from IP is simple
and straightforward.

Cost-effective
Off-the-shelf solutions and simple airtime
packages available. Compares especially well
with the option of extending terrestrial networks
to remote sites.

Dynamic resource allocation
Inmarsat's geostationary satellites can dynamically
allocate additional capacity to areas of high
demand. This ensures network access during
disasters, media events or other peaks.

More secure.
More resilient.
More possibilities.

As organisations seek better visibility and control over remote assets, the demand for satellite M2M grows. Remote management applications such as those that monitor sensors on pipelines, power grids and weather stations can reach further over satellite. Hybrid satellite-cellular solutions ensure constant visibility of assets on the move, including shipping containers and the trains or trucks that move them. Infrastructure monitoring and control can protect vital services such as power lines, wind turbines or railway tracks.

Whether you want to cut costs, optimise processes, upgrade safety and security or meet regulatory compliance requirements, Inmarsat can help. Our heritage in Supervisory Control And Data Acquisition (SCADA) technologies can support you in improving your operations and increasing your profits.

Banking and Finance
eCommerce

When financial services are needed in remote rural or tourist destinations, BGAN M2M's reliable and secure machine-to-machine IP connectivity, is a perfect fit for the low data requirements of ATM and Point of Sale transactions, allowing banks to reach their customers no matter where they are located.

Environmental monitoring
Water management

Sensors and remote-controlled switches enable accurate monitoring and adjustment of water management systems. BGAN M2M enables transmission of sensor data to improve visibility of changes in water levels and water quality.

Oil and Gas
Pipeline monitoring

Operators can monitor for corrosion and other risks by placing sensors at intervals along a pipeline. Inmarsat IsatData Pro provides visibility of sensor data at a very low cost per site, minimising the risk of disaster while ensuring the safety and security of the surrounding area.

Transportation
Asset tracking

Transporting valuable, hazardous or perishable cargo across remote regions often requires location tracking and driver monitoring for insurance purposes. IsatData Pro provides remote access to the vehicle for enhanced operator and asset security. You can even unlock a container remotely once the final destination has been confirmed.

Utilities
Distribution automation

Intelligent devices on distribution lines can manage the delivery of power to consumers. BGAN M2M automates monitoring and control of remote reclosers, switches, and other distribution devices. This enables 24/7 surveillance of the distribution network for voltage fluctuations, outages and service demands.

It's time to consider satellite

The technology behind satellite networks has advanced considerably in recent years. Yet many people still believe it's expensive and requires large, power-hungry terminals that don't integrate well with other applications.
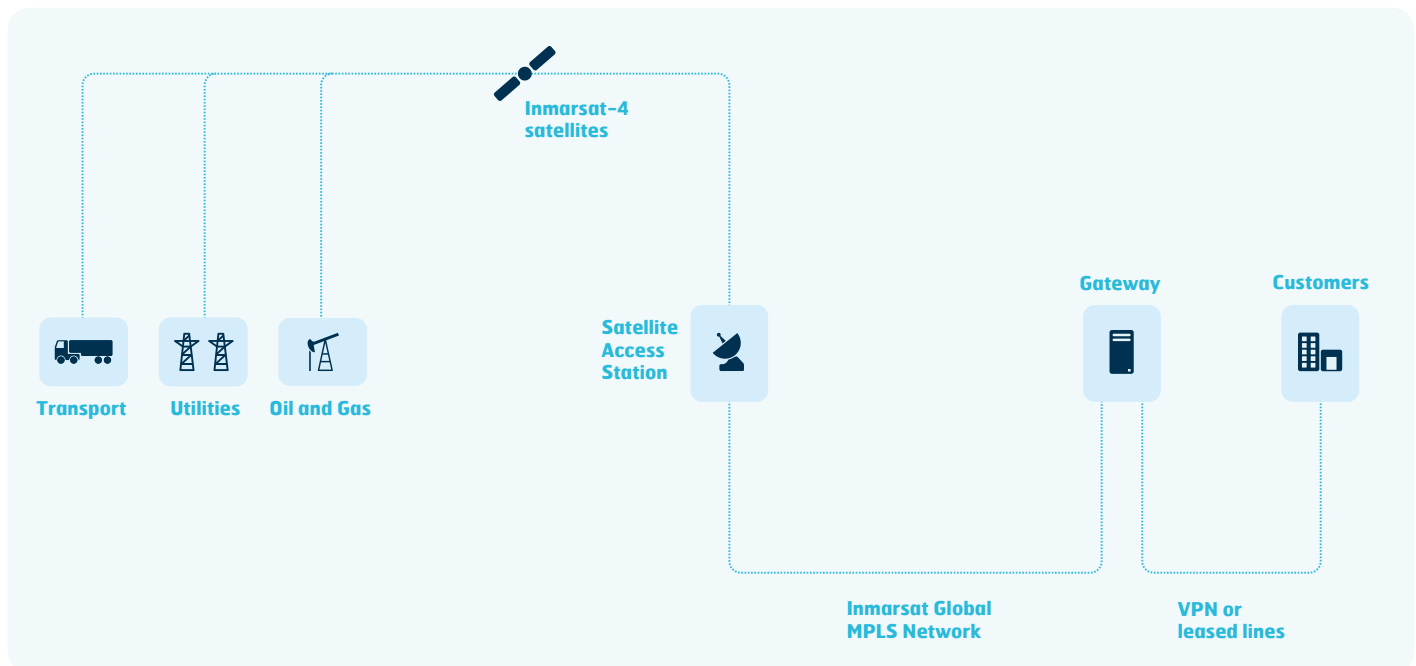
Today's satellite terminals can operate on very low power, enabling them to run for long periods with minimal attention. Installation requires no specialised skills and they are easy to maintain and support. With flexible airtime packages based on typical usage, satellite M2M can offer better value than many people realise.

With 99.9% network availability, the reliability of Inmarsat's network makes it the best option for day-to-day remote operations or as a back-up to terrestrial networks. That's why businesses are increasingly choosing Inmarsat for a whole range of different functions, whether it's to extend their reach, ensure continuous, real-time visibility over their assets or to increase the reliability of their existing networks.

Meeting your global M2M data requirements

Inmarsat offers two main M2M services: BGAN M2M and IsatData Pro.

Between them they enable a range of capabilities, from basic data collection to full IP networking. Both services are accessed through terminals designed for long-term, unmanned deployment in remote locations and offer high availability in all weather.

Inmarsat-4 satellites

Transport   Utilities   Oil and Gas

Satellite Access Station

Gateway

Customers

Inmarsat Global MPLS Network

VPN or leased lines

BGAN M2M

For customers with data volume requirements ranging from megabytes to gigabytes, such as real-time surveillance or high volume metering and telemetry, Inmarsat's BGAN M2M is the ideal solution. A 3G satellite network service, it provides full IP data connectivity supported by remote terminal management, debugging and configuration options. Using robust and lightweight hardware, BGAN M2M enables a wide range of M2M applications.
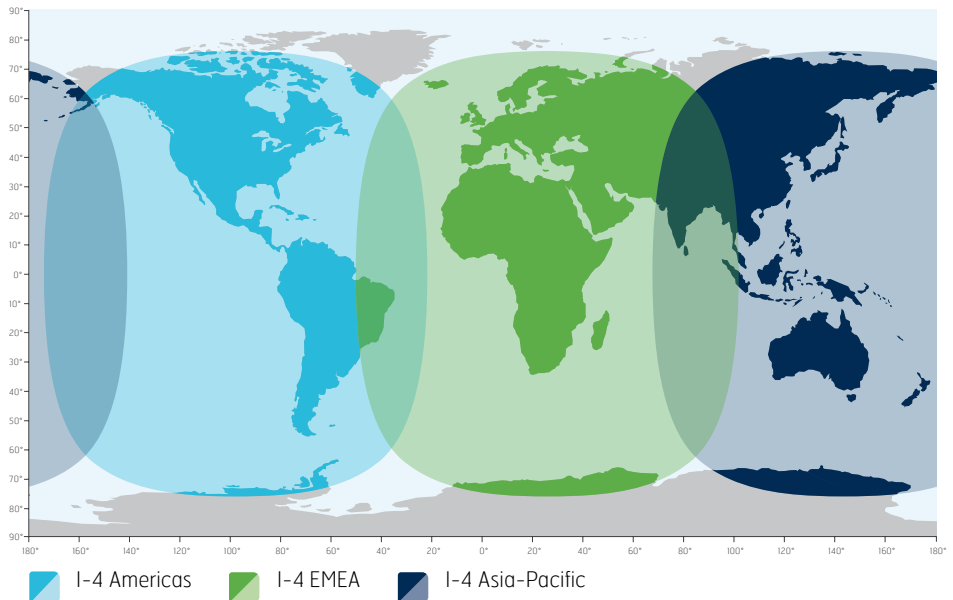
IsatData Pro

A low data rate service ideal for remote management of fixed assets including tracking and telemetry, IsatData Pro operates in near real-time anywhere in the world. With burst-mode communication and a gateway for store-and-forward messaging, IsatData Pro also offers a convenient web-based portal for adjusting settings. Applications can be run on the terminal to reduce data sent over the air. Suitable for mission-critical applications, it offers a wide range of protocols for data collection.

	BGAN M2M	IsatData Pro
Transport protocol	TCP / IP, UDP / IP	Store and forward, message-based
Interfaces	Standard Ethernet (RJ-45)	Serial-based
Performance	Up to 492kbps (send and receive)	6,400 / 10,000 bytes (send/receive)
Latency	Real time IP, low latency (satellite round trip takes 800ms)	Near real-time with up to 10KB payload delivered for that size from 45 seconds
Pricing unit	Per MB	Per KB
Billing increment	Per KB	Per byte
Core sectors	Utilities, Oil and gas, Retail banking, Environmental monitoring, Construction	Utilities, Oil and gas, Transportation and fleet logistics

Inmarsat-4 coverage

I-4 Americas   I-4 EMEA   I-4 Asia-Pacific

The map depicts Inmarsat's expectations of coverage, but does not represent a guarantee of service. The availability of service at the edge of coverage areas fluctuates depending on various conditions.

About Inmarsat

For over thirty years we've been a world-leading provider of global satellite voice and data services to public and private sector organisations around the world. Inmarsat's M2M services offer a cost-effective and reliable alternative to terrestrial cellular networks for connection to and operation of unmanned and remote devices around the globe. Our seamless worldwide network helps our clients connect and communicate with some of the most remote and inhospitable places on Earth.

inmarsat.com/m2m