



MARITIME PATROL VESSEL
COMMUNICATIONS
AND SURVEILLANCE SOLUTIONS

INMARSAT GLOBAL GOVERNMENT
COMMUNICATIONS MADE CERTAIN



MARITIME PATROL VESSEL COMMUNICATIONS AND SURVEILLANCE SOLUTIONS

State-of-the-art communications and surveillance equipment for surveillance and anti-piracy

Combining Inmarsat's unrivalled global communications network with the latest camera and codec technology delivers a powerful and versatile capability ideally suited to anti-piracy and anti-smuggling operations.

Maritime security is a high priority for every government. Successful maritime surveillance and associated operations deter and control piracy, illegal immigration, smuggling and trafficking in drugs and arms. Many countries have long coastlines and vast expanses of territorial waters which, if left unsecured, leave a country potentially vulnerable to terrorism and organised crime.

Inmarsat has identified various industry standard equipment that can be combined to meet the challenging maritime surveillance and operations requirement. Cameras such as the FLIR M-series provide thermal imaging and low-light

performance with an ultra-compact design ideally suited for small patrol vessels. Imagery can be passed between vessels or to the Maritime Operations command either via Inmarsat FleetBroadband satellite communications or by 3G/4G/LTE terminal if terrestrial network connectivity is a requirement.

An intelligent router will determine the least cost routing.

FleetBroadband delivers global satellite communications using the I-4 constellation of satellites and a comprehensive terrestrial network. FleetBroadband delivers standard and streaming IP and ISDN through a range of small and easy-to-operate terminals. FleetBroadband provides maritime coverage everywhere in the world with the exception of the extreme poles, and is ideally suited to integrated maritime surveillance applications.



THE INMARSAT FLEETBROADBAND SERVICE

FleetBroadband is the first truly global maritime communications service offering simultaneous broadband data and voice via a compact antenna – allowing unprecedented connectivity between vessels and shore and even up to flying aircraft should you operate across all paradigms.

FleetBroadband provides a cost-effective, fast, reliable, and easy-to-use “always-on” solution for e-mail, Internet, corporate network access, and voice services. Based on the BGAN network using 3G standards, FleetBroadband delivers data rates up to 432 kbps utilizing Inmarsat’s I-4 satellite constellation.

FLEETBROADBAND APPLICATIONS:

FleetBroadband supports a complete array of the latest IP services for maritime users:

- E-mail and webmail – sent and received without delays
- Real-time weather and ECDIS updates - for optimal routing
- Remote Internet and company Intranet access
- Secure communications
- Large file transfer
- Vessel/engine telemetry
- Crew communications - including web, GSM, VOIP
- SMS and instant messaging
- Videoconferencing
- Store and forward video



LEAST COST ROUTING

Peplink Balance multi-WAN router

The Peplink Balance intelligently distributes network traffic over multiple WAN links, including Satellite, DSL, cable, 4G LTE, and 3G. Should a connection fail, the Peplink Balance automatically switches to a healthy link in less than a second, seamlessly maintaining Internet connectivity and corporate VPN functionality. Using Peplink's unique SpeedFusion bandwidth bonding technology, you can aggregate the bandwidth of all available WAN links, significantly boosting speed, reliability, and failover performance.

Automatic Failover keeps your network up and running by continually checking the health of all connected links and routing traffic around inactive or intermittent connections. You can even customize Automatic Failover's behaviour, specifying conditional or dedicated backup links that dynamically respond to network status.

The Peplink Balance's extensive range of features, such as WLAN Controller, User Group QoS, and Bandwidth Report, lets you manage your WAN, VPN, and wireless network with a single box.



FLIR CAMERAS

Inmarsat has previously offered FLIR cameras within various surveillance proposals and solutions. The M-Series combines a thermal imaging camera with a low light camera. It provides crisp, clear thermal imagery in total darkness and light fog or smoke. Packaged in a small, ultra-compact gimbal it is designed for the most demanding maritime applications. The FLIR M-Series is suitable for anti-piracy, shipboard security and many other operational applications.



MCU-100

The MCU-100 is a 4G wireless communication unit that provides instant, ad-hoc/mesh communications as a part of a mobile network. Communication between MCU-100 units is both secure and of broadband quality, with up to 40Mbps transmission between units. Ideal for large area coverage, including non-line-of-sight (N-LOS) conditions in rural and urban areas, with extended range provided by powerful relay or multi-hop mesh capabilities. Its compact size makes this device suitable for public transportation, emergency/security vehicles as well as helicopters/UAV/UGV usage.





THE CHALLENGE

Piracy is an increasing threat to the free movement of ships and other vessels in territorial and international waters. Pirates target vessels of all types and sizes, inshore and offshore, often operating from small unobtrusive craft. Other maritime challenges such as illegal immigration and smuggling threaten the economic and social well-being of nation states and their coastlines. In order to counter and neutralise these threats, navies and other maritime forces require an accurate and timely maritime operational picture. That operational picture is built from accurate and timely surveillance provided from patrol craft and similar vessels.

THE SOLUTION

Inmarsat's global mobile satellite communications network is at the heart of the solution to this challenge. Inmarsat can be used as the primary means of fast data transfer for visual sensors, for unmanned aerial vehicles and for voice communications. It is also a highly effective back-up system that can be guaranteed to provide resilient communications in the event of the accidental or deliberate disruption of a primary communications network. Combined with a range of carefully chosen complementary components Inmarsat is the backbone of any maritime surveillance and communications system.

Inmarsat continuously invests in growing its capabilities as the demand for bandwidth increases. Our network programs meet today's needs, while preparing to equip the government requirements of tomorrow. By enhancing our current services and expanding into the world of Ka-band through our Global Xpress service we are increasing our network capability to meet your operational requirements. Inmarsat is the network of choice for today and for the future.

HOW TO BUY

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