

# Galaxy Inmarsat-C/GPS

## *Ship Earth Station*

### Key features and benefits

- Three time NMEA award winner
- Type Approved for GMDSS
- Fishery management approvals
- Integral GPS included as standard
- Supports Internet addressing
- More units delivered than any other Standard-C product

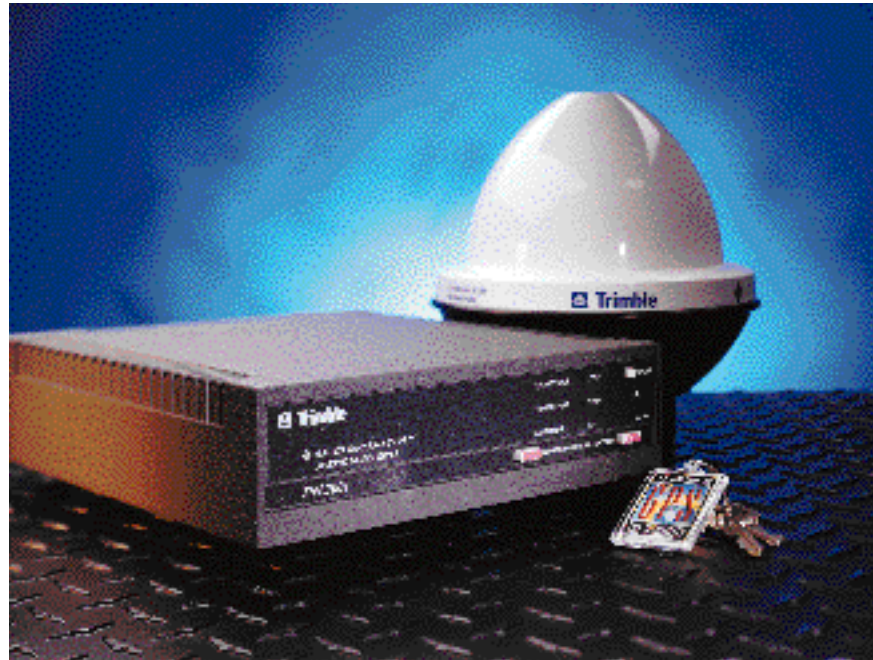
The Trimble Galaxy Inmarsat-C/GPS™ satellite communications transceiver is the first choice for commercial shipping and fishing operators. The NMEA award-winning Galaxy has earned this reputation by offering professional mariners simple installation, an efficient yet powerful user interface, and unparalleled reliability.

### Global 2-way messaging

Galaxy enables users to access the highly reliable Inmarsat-C two-way messaging service from virtually anywhere in the world. Maritime users may exchange messages with their offices, homes and other vessels using 5-bit, 7-bit, or 8-bit transmissions. Messages can be sent via Telex, Internet Email, Fax, or PSDN delivery.

### Component level GPS integration

Galaxy is the only Inmarsat-C product available that incorporates a GPS receiver as a standard feature. Trimble's award winning chip-level GPS integration provides a high-integrity position reporting facility that can be tailored to a wide range of vessel management and monitoring applications. Galaxy provides position reporting in response to



polling commands from your office in both message mode and data reporting mode.

### GMDSS approved

Galaxy has been type approved for the Global Maritime Distress and Safety System (GMDSS). Through an integrated Enhanced Group Call (EGC) receiver, vessels can receive regional SafetyNET weather and safety broadcasts at no charge. FleetNET support is also included, which allows shore-based users to broadcast private data to specific groups of vessels.

The standard Galaxy package includes the Galaxy

software, which allows users to initiate message transfers and review received messages from a single user screen. Simple commands are provided to accelerate the user's learning curve with minimal training.

### Product support

The Galaxy team provides a high quality, full-featured product to support your satellite messaging needs. Galaxy is backed by a world-wide network of field sales offices, as well as distribution and support partners committed to the highest level of customer service.

# Trimble

# Galaxy Inmarsat-C/GPS™

## Ship Earth Station



### STANDARD FEATURES

Inmarsat-C Ship Earth Station	Type Approved for Inmarsat-C maritime and GMDSS applications. Includes integrated Enhanced Group Call (EGC) receiver.
Embedded GPS Receiver	High-integrity, tamper-resistant position source at no additional cost.
Flexible Position Reporting Facility	Supports Message-Mode, Polling, and Data Reporting Services.
Event-Driven Position Reports	Automatic position reports may be sent when the power is disabled and reconnected, and/or when the antenna is disconnected or blocked.
QuickSend Software	Easy-to-learn and use DOS-based Galaxy messaging software package.
Password Protected Access Control	Prevents unauthorized transceiver reconfiguration.

### PHYSICAL CHARACTERISTICS

#### Transceiver:

Installation	Internal (IME)
Operating temperature	-25°C to +55°C
Survival temperature	-55°C to +85°C
Humidity	95% at +40°C
Operating vibration	5-20 Hz, .005 g <sup>2</sup> /Hz; 20-150 Hz, -3 dB/oct
Survival vibration	5-20 Hz, .05 g <sup>2</sup> /Hz; 20-150 Hz, -3 dB/oct

#### Antenna:

Installation	External (EME)
Operating temperature	-35°C to +55°C
Survival temperature	-55°C to +85°C
Operating vibration	5-20 Hz, .005 g <sup>2</sup> /Hz; 20-150 Hz, -3 dB/oct
Survival vibration	5-20 Hz, .05 g <sup>2</sup> /Hz; 20-150 Hz, -3 dB/oct

### INTERFACES

#### Transceiver:

Antenna	Coax; Type-N connector
DTE	RS-232 Serial; DB-9 Female connector
Printer	RS-232 Serial; DB-9 Male connector
GPS	RS-422 Serial; NMEA 0183 (GLL, GGA, VTG); CONXALL 6-pin connector
Remote alarm	Discrete, CONXALL 7-pin connector
Power	DC, CONXALL 4-pin connector

#### Antenna:

Connector	Type-N
Installation	Pole mount
Antenna cable attenuation	<10 dB (max) @ 1,546MHz <0.2 round trip resistance

### TYPE APPROVALS

Inmarsat	IT-04-023-01(GMDSS)
CE (VDE)	20341-3250-1001/F1-KBK2-stt
FCC (USA)	JUP7001-MG

### RF/ELECTRICAL CHARACTERISTICS

#### RF Specifications:

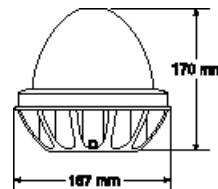
Transmitter	1,626.5-1,646.5MHz
Receiver	1,530.0-1,545.0MHz
Data rate	600baud
G/T	-23dB/°K
EIRP	14±2 dBW at 5 deg. elevation, RHC

#### Electrical Specifications:

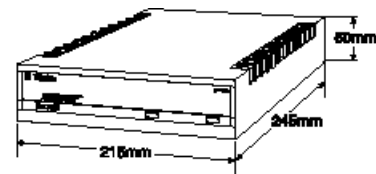
Voltage	9.6-31.2VDC
Power (receive)	12 W Maximum
Power (transmit)	110 W Maximum

### GPS RECEIVER CHARACTERISTICS

GPS receiver	1,575.42MHz
Satellites tracked	8 maximum
Update rate	1 second (typical)
Acquisition time	<2 minutes 2-dimensional (typical, cold start)
Re-acquisition time	<8 seconds following 30 second blockage
Accuracy*	15 m RMS (typical)
Position Velocity	0.2 km/hr RMS (steady state)



Weight: 2.0 kg



Weight: 2.9 kg

\* Note: All GPS receivers are subject to degradation of position and velocity accuracies under Department of Defense imposed Selective Availability (S/A). Position may be degraded up to 100 meters 2D RMS.

Visit our web site at [www.trimble.com](http://www.trimble.com).

Specifications subject to change without notice.

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