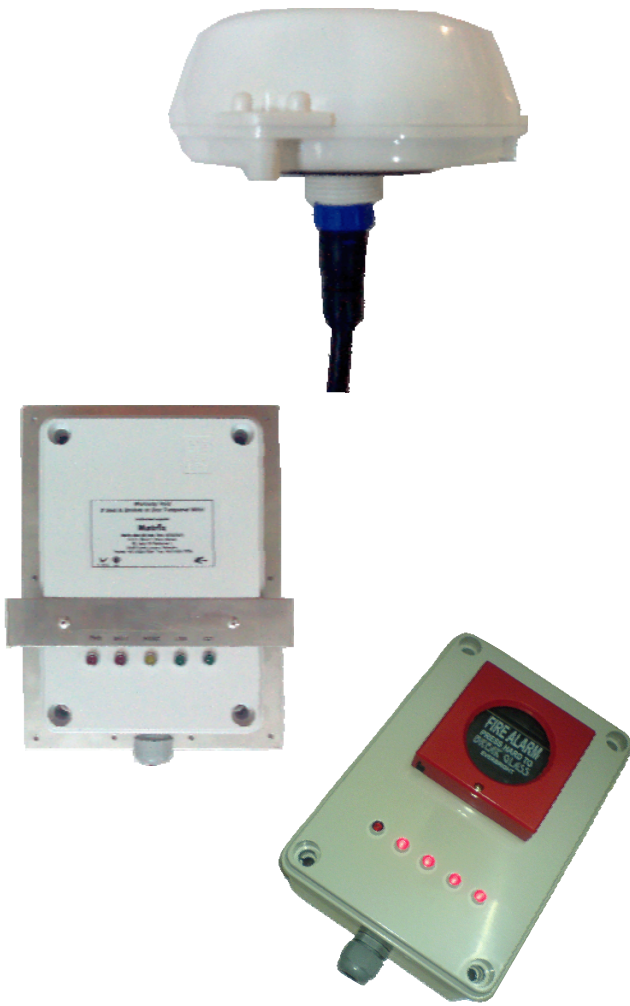


# **uTrac** MobileTracker IM-D

*Inmarsat D+ Vessel Tracking Unit For Vessel Tracking & Monitoring System*

*The mobile hardware unit that provides for the monitoring & management of vessel fleets.*



The **uTrac** MobileTracker IM-D is a third generation Vessel Tracking Unit that is installed in a vessel to acquire its location, as well as, data related to pre-determined events or incidents. It is the mobile hardware component of a Vessel Tracking & Monitoring System that provides for the tracking, monitoring and management of vessels deployed within a maritime fleet. The data acquired by the **uTrac** MobileTracker IM-D are communicated via the Inmarsat communication network and the Internet to a Central Monitoring Station located at the management office of the user that logs and process the incoming data from the Vessel Tracking Unit with the base station application software installed on a Personal Computer system or a Local Area Network system. The processed data are then displayed on the PC display or LAN terminals, with position data displayed on maritime charts.

The product incorporates an intelligent controller-charger board with a back-up battery and an Inmarsat D+ SATAMATICS SAT 202 terminal with a built-in 50 parallel-channel GPS engine that acquires the position data of the vessel from the satellite constellation of the Global Positioning System. The Mobile Tracker IM-D utilizes the Inmarsat D+ satellite communication platform for the transceiving of data from the MobileTracker IM-D to the Central Monitoring Station and vice versa.

The functions of the MobileTracker IM-D include transmission of position reports after being polled by, or according to the time intervals, or distance travelled as defined by the Central Monitoring Station. Vessel related events monitored through configurable I/O ports of the unit can also be transmitted to the Central Monitoring Station. The position reporting interval of the MobileTracker IM-D can be changed or modified at any time by the Central Monitoring Station off the air via the Inmarsat D+ communication network.

An optional enhancement for the MobileTracker IM-D is the interfacing of a notebook computer to the unit. The interfaced notebook computer will enable two-way short text messaging between the Central Monitoring Station and the Vessel Tracking Unit.

Integrated GPS/Inmarsat SATAMATICS SAT 202 Transceiver with global coverage

Built-in Global Positioning System receiver module (50 parallel channels) with accuracy of <2.5m.

Tamper Detection, and Back-up Battery

Emergency Distress Alerting (Optional)

## **VTMS**



### **Universal Tracker**

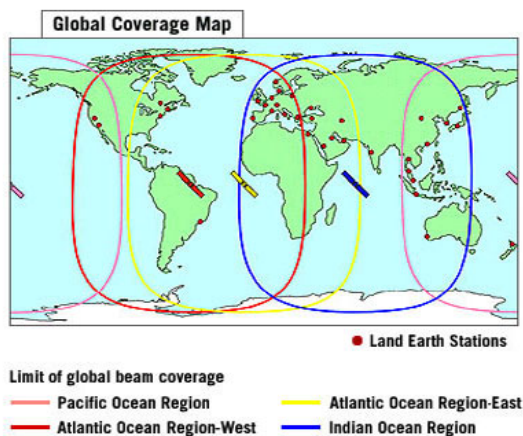
Product Data

Model MobileTracker IM-D

# uTrac MobileTracker IM-D

## Features

- Transmits position of vessel according to time interval or distance set by base station.
- Transmits position of vessel when requested by base station.
- Power supply On detection.
- Main power supply "cut" alert with a back-up battery.
- Provides automatic switch-over to back-up battery in the event of external supply disconnection.
- Antenna blocked and unblocked alert.
- Distress button pressed alert.
- Tamper switch activated alert.
- Tamper switch reset alert.
- Two-way short text messaging interface with notebook computer (Optional).
- VTU position reporting interval setting configurable by base station off-the-air (via Inmarsat D+ network).
- Intelligent controller/charger unit



## Specifications

### SATAMATICS SAT 202 Transceiver

- Dimensions: 112mm(D) x 45.75mm(H)
- Weight: 350g
- Communication Platform: Inmarsat D+
- G/T:  $\geq -25\text{dB/K}$  at  $\text{EL}=30^\circ$
- EIRP: 0-9 dBW
- Elevation Angle Range:  $0^\circ$  to  $90^\circ$
- Frequency: 1525.0 - 1559.0 Mhz (Receive)  
1626.5 - 1660.5 MHz (Transmit)

### GPS Module

- Frequency: 1575.42 MHz
- Channels: 50 parallel-channels
- Accuracy:  $<2.5\text{m}$
- Position update: 1 second

### Power Input & Power Consumption

- Power Input: 9.6V to 32 'smoothed' DC
- Receive: 1.5W
- Transmit: 6W
- Sleep: 0.5mW

### Environmental

- Temperature:  $-40^\circ\text{C}$  to  $+70^\circ\text{C}$
  - Humidity:  $\leq 95\%$  @  $+40^\circ\text{C}$
  - Shock (survival): Half-sine 6ms,  $300\text{ms}^{-2}$
  - Vibration: 5-20Hz:  $1.92\text{m}^2\text{s}^{-3}$  random noise  
20-500Hz: -3dB octave random noise
- Ingress Protection: IP66 (when interface connector is correctly mated)

### Backup Battery

- 12 VdC, maintenance-free lead acid battery



### SAL COMMUNICATIONS (M) SDN. BHD.

(731770-P)

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