



# TAM-212

## Tracking & Monitoring

Global solution for tracking and monitoring with integral power source

### Attributes

EMS Global Tracking's TAM-212 provides global tracking and sensor monitoring for fixed and mobile assets such as trailers, containers, tanks and railcars. This slimline solution requires no external power source as an internal battery will provide up to 5 years of maintenance free operation.

The TAM-212 incorporates magnetic feet in addition to fixed mounting points. Therefore providing greater flexibility for the user to monitor transitory or fixed assets.

EMS Global Tracking offer a one-stop solution to manage your fleet:

- Remote terminals with a choice of sensor monitoring options
- A satellite airtime package to suit your needs
- Secure web based data access
- Standard and bespoke user application software

### Features

Based on EMS Global Tracking's own SAT-202 satellite modem, the TAM-212 incorporates the following capabilities:

- Highly accurate GPS position reports
- Secure logging of positions
- Reliable satellite communications using the Inmarsat IsatM2M service
- Configurable reporting intervals and remote polling
- Integral battery pack with low capacity alarm
- 5-year battery life when sending 2 transmissions per day
- Robust enclosure with IP66 ingress protection
- Serial communication via local port
- Mounting by either built-in magnetic feet or screw fixings

The TAM-212 is the most cost effective solution for tracking only applications. It provides:

- GPS measurement data:
  - Position - latitude and longitude
  - Speed
  - Heading
- Activation Key - disables transmissions when not in use to conserve battery life

# TAM-212

## Tracking and Monitoring Technical Specifications

### Physical

Dimensions	247mm x 178mm x 48mm
Weight	1.5kg

### Environmental

Temperature	-35°C to +55°C
Humidity	≤95% @ +40°C, non-condensing
Ingress protection rating	IP66
Altitude	2000 metres (max. operating limit for approvals compliance)

### Local Serial Communication

Interface	Asynchronous serial RS232
Baud rate	9600 bps
Parity/data bits/stop bits	N, 8, 1

### Frequency Range

Transmit	1626.5 MHz to 1660.5 MHz
Receive	1525.0 MHz to 1559.0 MHz
GPS	1575.42 ± 1.0 MHz

### Elevation Angle Range

0° - 90°

### Transmitter

EIRP	0 - 9dBW
Modulation	2 level FSK, 20 Hz tone spacing
Tx burst duration	2s or 8s



### Receiver

G/T	≥-25dB/K at EL = 30°
Modulation	32-ary FSK, 20Hz tone spacing

### GPS

Channels	50
Time to first fix (typical)	
Cold Start	<29s
Hot Start	<1s (GPS was off for less)
Accuracy (SA Off)	than 2 hours
Position (CEP, 2D)	2.5m (Typical)
Dynamic capability	
Velocity	515 m/s maximum
Acceleration	≤4g
Maximum update rate	1s

### Certification

Inmarsat Type Approved  
FCC Compliant  
Ingress: IP66  
CE

These specifications are subject to change without notice