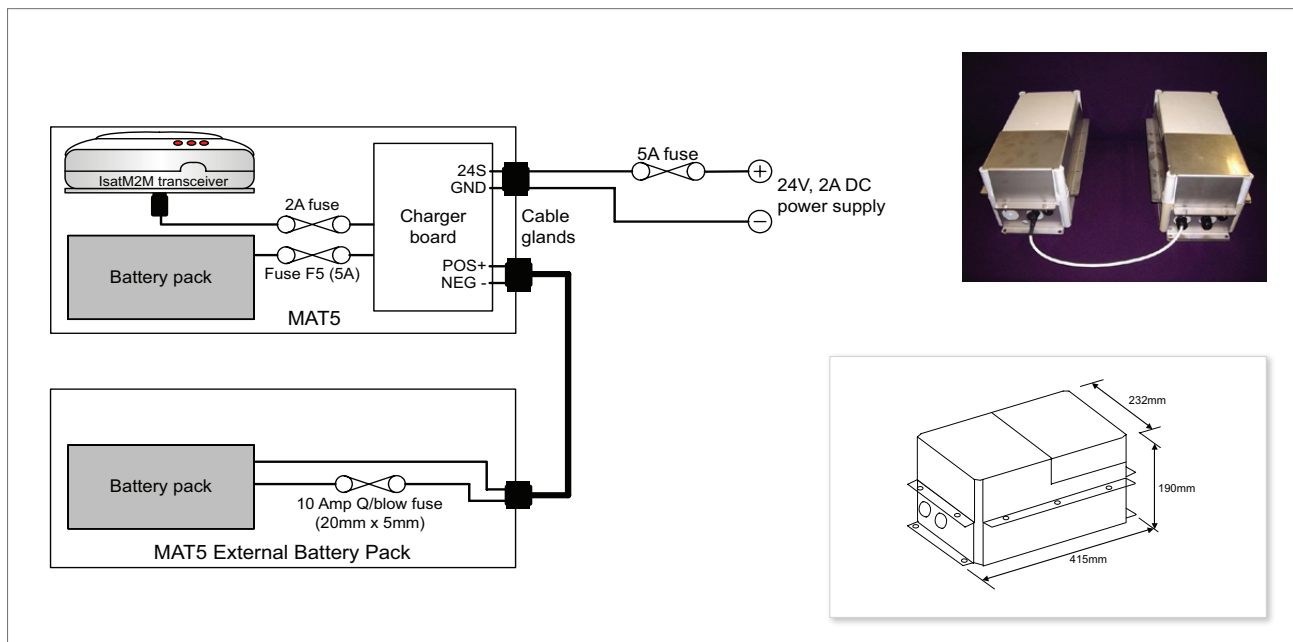




MARINE ASSET TRACKER

MAT5 Hardware Specification

The MAT5 satellite transceiver is ideally suited for the Oil & Gas sector. It has been specifically designed for Rig/Platform Monitoring Management where existing power supply onboard can be connected to the unit to provide a constant power source to the Internal Battery Management system.



The unit requires a stable external DC supply to maintain the battery charge. On disconnection of external power, the unit will operate for approximately 14 days. Operation of the unit is completely automatic, and the only user intervention that should be required after installation is to restore the external power supply in the event of disconnection.

On its default setting, the unit will transmit a position report every 24 hours. However, the variable position reporting function enables the shore-based operator to increase reporting frequency to up to 15 minutes, as required.

Key Benefits

- Robust enclosure manufactured from durable composite materials
- Up to 14 days position reporting on reserve power
- Provides accurate audit trail to mineral management authorities
- Reliable position reporting during extreme weather conditions

MAT5 TECHNICAL SPECIFICATION

| PHYSICAL | |
|------------------------------|--|
| Overall dimensions | Length: 415 mm x Width: 232 mm x Height: 190 mm per enclosure |
| Weight | 18kg |
| External battery pack weight | 17kg |
| Hardware | Composite polystyrene and stainless steel enclosure, SkyWave DMR-800D transceiver, charger board and battery. External battery pack; composite polystyrene and stainless steel enclosure, battery pack. |

| ENVIRONMENTAL | |
|----------------------------------|---|
| Operating temperature range | -40° to +70° C |
| Storage temperature range | -40° to +85° C |
| Humidity | 95% Relative Humidity at 30° C |
| Vibration | 5-20 Hz: 1.92 m ² /s ³ random noise 20-500Hz: -3dB octave random noise |
| Shock (survival) | Half sine 6ms, 300m/s ² |
| Transceiver environmental rating | IP67/NEMA-4X |
| Enclosure environmental rating | IP68 |

| ELECTRICAL | |
|----------------------------------|---|
| Power consumption (typ. @ 12Vdc) | Tracking mode (GPS on): 0.9W; Transmit: 7.6W |
| Battery pack | 21 Ah sealed leadacid |

| SATELLITE | |
|-----------------|--|
| Coverage | Global, five overlapping regions |
| Frequency range | Rx: 1525.0 to 1559.0 MHz Tx: 1626.5 to 1660.5 MHz |
| EIRP | 9 dBW max |
| Elevation angle | 0 to +90 degrees |

| GPS | |
|-------------|-----------------|
| Frequency | 1575.42 MHz |
| Channels | 16 parallel |
| Acquisition | Cold-start: 34s |

| CERTIFICATIONS / COMPLIANCE | |
|-----------------------------|---|
| Satellite | Inmarsat D+/IsatM2M Type Approved |
| Regulatory | FCC; RoHS; CE Mark (R&TTE); Anatel: IEC/EN 60945 |