## TSS DMS-05 Surface Motion Sensor

The TSS DMS-05 is a Surface Motion Sensor designed specifically for the emerging needs of multibeam users allowing highly productive surveys aboard small boats, in rough sea conditions undertaking tight turns and rapid speed changes. The sensor can interface to an optional GPS unit or external GPS/DGPS or a speed log if already available. The auxiliary input also accepts Heading gyro compass data. Systems are available for deck mount or in 1000m underwater housings for ROV, AUV or Towed vehicle applications.

## Key Features

- High dynamic accuracy and immunity to vessel turns and speed changes.
- Easy and convenient to install.
- No Data timing errors
- Real time digital and analogue updates.
- Compact unit.

## Technical Specifications

| Title | Value |
|---|---|
| Heave | Accuracy: 5 cm or 5% whichever is greater,<br>Range: ±99m Resolution: 1cm,<br>Bandwidth: 0.05 to 10Hz |
| Roll & Pitch | Accuracy: 0.05% dynamic<br>Range: ±50° Resolution: Digital 0.01° (RS232 or RS422), Analogue 0.024° (12 bit - 10V ~+10V),<br>Bandwidth: 0 to 10Hz |
| Update Rate | Digital: up to 200Hz, Analogue: up to 500Hz |
| Operating Temperature | 0° to +40°C |
| Power Requirement | 18 to 36V DC (10W) |
| Velocity Input Packet Format | NMEA 0183 VTG TSIP (Trimble Standard Interface Protocol) |
| Heading Input Packet Format | NMEA 0183, HDT:SGB1000S: SGB ASCII; Robertson: Plath Navigat X |

## Dimensions

| Title | (mm) | (inch) | (kg) | (lbs) |
|---|---|---|---|---|
| | 257 x 127 x 171mm | 10.1" x 5" x 6.7" | 2 kg | 4.4 lbs |