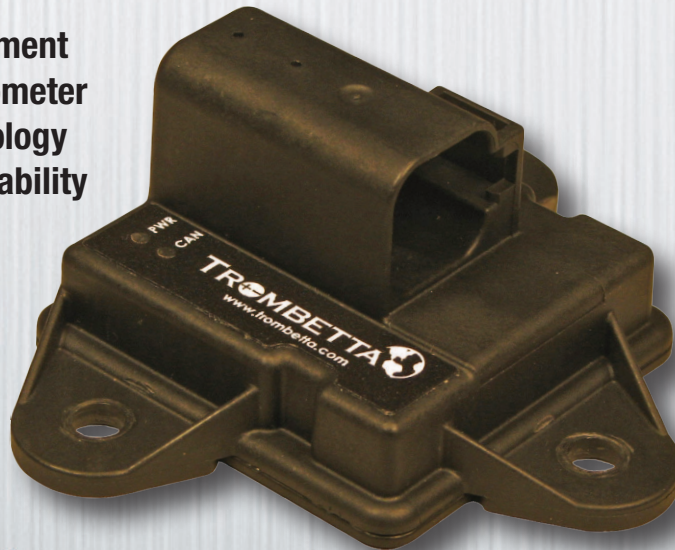


J1939 Gyro-compensating Inclinometer

3 axis angle measurement using MEM's accelerometer and gyroscope technology provides rock solid stability and accuracy.



Features

- Precise angle measurement even on high vibration and shock equipment
- MEMs sensor redundancy for exceptional reliability
- Configurable calculation options allow optimization to specific applications
- Configurable zero point offset
- Automatically detects bus speed from 125 kbd to 1Mbd
- Automatically detects the mounting configuration
- Shock resistance up to 50 g
- Operating temperature range of -40° C to 85° C
- Supply voltage range of 8V to 45V
- 0.002° resolution
- Reverse battery protection
- 3 – point mounting to prevent assembly mounting errors
- IP67 rating
- 48V jump start and load dump compliant
- RoHS / REACH / Conflict Free compliant
- Power and communication LEDs

PN 99-0680

Pitch & Roll Angle measurement
(+64.5°, -64°) – to SAE J1939 standard*

PN 99-0670

Blade angle measurement ($\pm 180^\circ$)

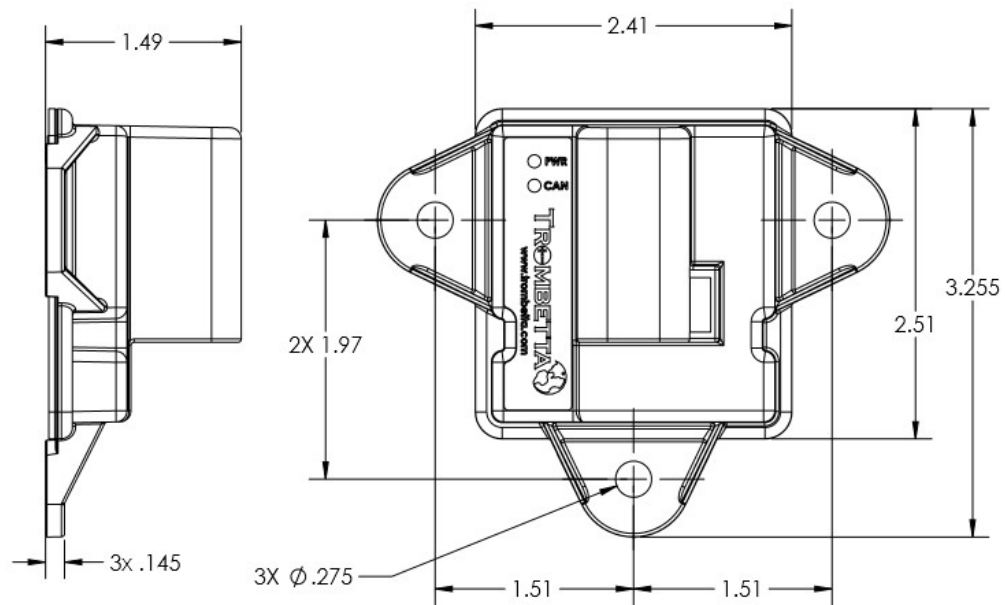
PN 99-0550

Combination Pitch & Roll*, Blade angle measurement, raw accelerometer, gyroscope and temperature data, other added features.

**Higher angle measurement up to $\pm 90^\circ$ can be accommodated*

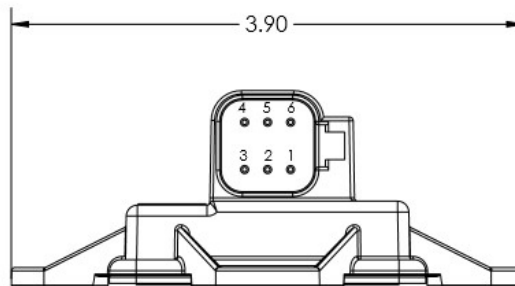
TROMBETTA 
DC Power Solutions for a Harsh World

414-410-0300 • trombetta.com



Max torque – 30 in-lbs.
Housing with compression limiter inserts available.

Recommended hardware: SAE ¼-20 or M6 standard housing, 10-32 or M5 w/compression limiter inserts



General Parameters	99-0670, 99-0550	99-0680, 99-0550
Measurement Angle	± 180°	+64.5°, -64°
Resolution	0.002°	0.007°
Accuracy (typical)	± 0.2°	± 0.2°
Communication Interface	SAE J1939	SAE J1939

Electrical Parameters	Min	Typ	Max	Units
Supply Voltage	8	14	45	VDC
Reverse Battery Voltage	–	–	–45	VDC
Current Consumption	8.5	–	16.5	mA
Electrostatic Discharge (ESD)	–15	–	15	KV

Mechanical Parameters	
Storage Temperature	– 40° C to 85° C
Operating Temperature	– 40° C to 85° C
Mechanical Shock - Operational	50g
Ingress Protection	IP67
Mating Connector	Deutsch DT04-6S

Test Parameters	
Thermal Cycle Test	SAE J1455 Section 4.1.3 8-Hour Cycle
Thermal Shock Test	ISO16750-4 Section 5.3.2
Drop Test/ Handling Shock	IEC 60068-2-31 Section 5.1, 5.2
Humidity & Temperature Cycling (Thermal Cyclic Aging)	SAE J1455 Section 4.2.3, Figure 4A, 8-Hour Cycle
Fluid Compatibility	SAE J1455 Section 4.4
Thermal Shock Immersion	ISO16750-4 Section 5.4.3
Ingress Protection (IP)	IEC 60519, IP67
Vibration-Sinusoidal	10-22.289Hz 10mm P-P Displacement, 22.289Hz to 500Hz, 20g RMS acceleration
Vibration-Random	Trombetta profile, 11.55G RMS, 5-2000Hz
Load Dump	ISO16750-2 Section 4.6.4.2.1, SAE J1113-11, Pulse 5A, ISO7637 Pulse 5A