

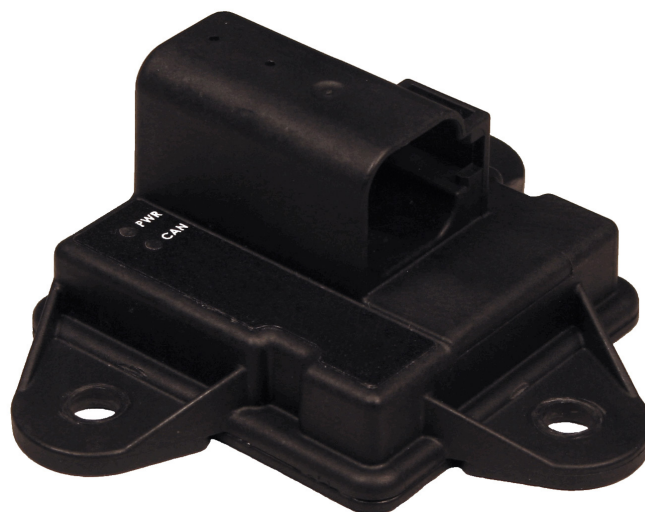
IQS J1939 Inclination Sensor

Reliable angle measurement even on high vibration and shock equipment



Key Features

- Solid-state gyro-compensating inclinometer utilizes MEMS technology to precisely output the angular data to the J1939 bus.
- MEMS sensor redundancy for exceptional accuracy.
- Configurable calculation options allow optimization.
- Configurable zero point offset.
- Automatically detects bus speed 125 Kbps to 1 Mbps.
- 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 32V.
- Reverse battery protection
- 48V jump start and load dump compliant
- LED Status Indicators



General Specifications

	Blade Version	Pitch & Roll Version
Measurement Angle	± 180°	± 65°
Resolution	0.002°	0.007°
Accuracy (Typical)	± 0.3°	± 0.3°
Communication Interface	SAE J1939	SAE J1939

Electrical Specifications

	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

Environmental Specifications

Storage Temperature	-40° to 85° C
Operating Temperature	-40° to 85° C
Operational Shock	50 g
Ingress Protection	IP67
Package Dimensions	3.9" W x 3.26" L x 1.49" H

Unit Connection

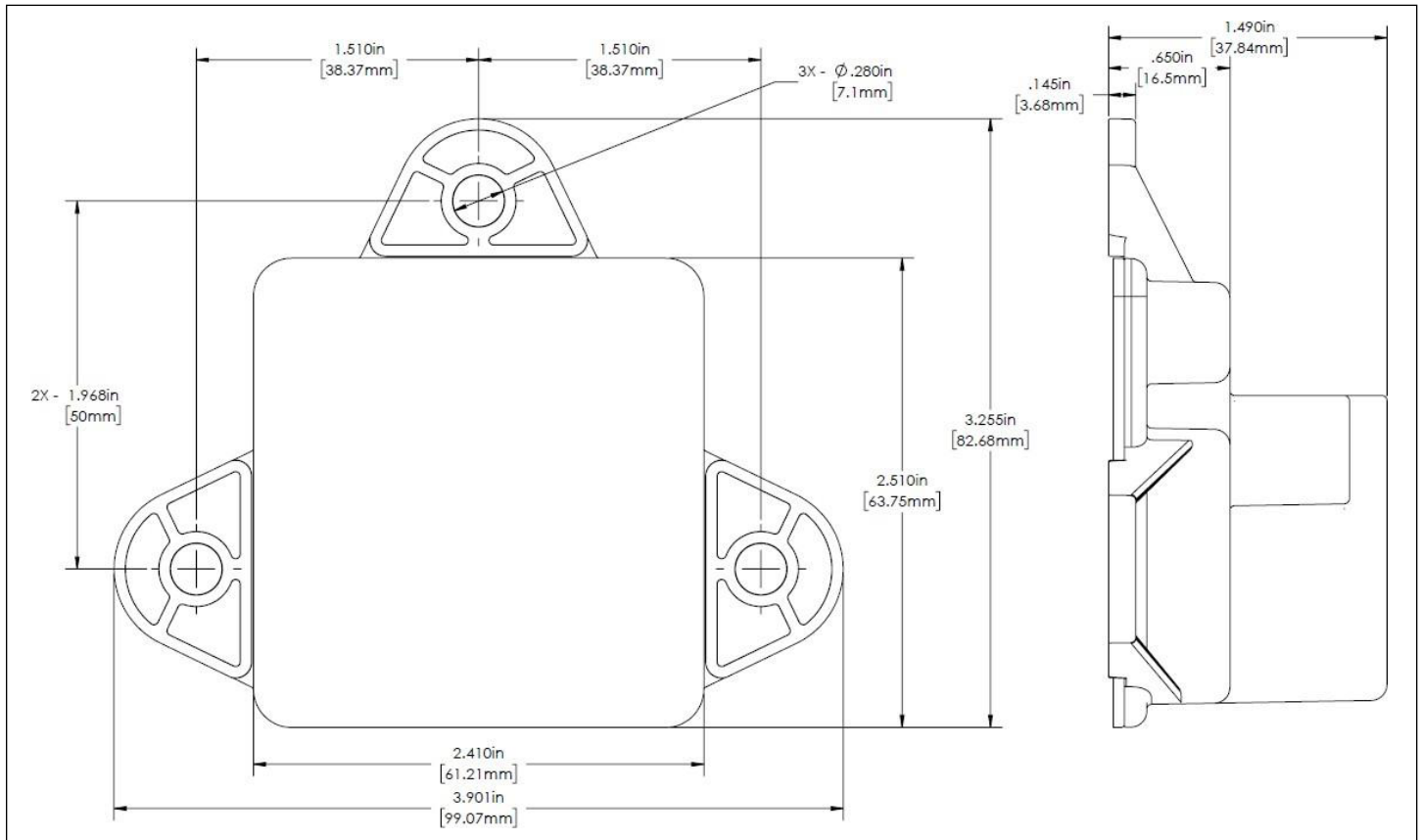
Connection Type	Deutsch DT06-6P
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Technical Drawing



Part Numbers

PN 100001092_0670

Blade Version, angle measurement ($\pm 180^\circ$) to SAE J1939 standard

PN 100001120_0680

Pitch & Roll Version, angle measurement ($\pm 65^\circ$) to SAE J1939 standard

PN 100001091_0550

Field Configurable Version for Pitch & Roll OR Blade angle measurement, raw accelerometer, gyroscope and temperature data, other added features.