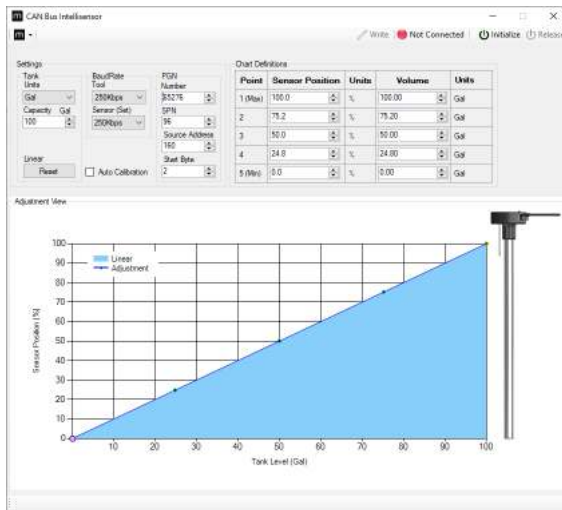


# INFORMATION IS POWER

## CAN Bus IntelliSensor®

Precisely and reliably track your fuel with maximatecc's CAN Bus IntelliSensor®. The IntelliSensor has no float arm or moving parts, ensuring that you always get accurate fuel measurement readings.

Unique to our design is the auto-calibration pin, which measures the capacitance of many different hydrocarbon-based mediums, including diesel, gas, jet fuel, hydraulic fluids and engine oil.



### Configuration tool

Our configuration tool allows for quick and easy selection of CAN source addresses, baud rate, PGN identifiers and SPN parameters. You also can set the auto-calibration feature with the configuration tool so the IntelliSensor immediately measures your fuel's dielectric reading and gives you an accurate level.

The configuration tool can be set to communicate diagnostic trouble codes, including calibration or fuel level errors. For vehicles with uniquely shaped tanks, use the configuration tool to program the volumetric profile.



# maximatecc.



## IntelliSensor: MODERN ELECTRONIC FUEL LEVEL SENSOR

### Ideal for harsh terrain

With one solid, sealed system, no contaminants can corrupt the IntelliSensor's electronics. This fuel sensor is corrosion proof, has a -40 to 85° C operating range and meets SAE and OEM standards for shock, salt spray and vibration. In addition, the IntelliSensor features a standard SAE five-hole flange so it can be rigidly installed in the existing tank holes.

### Fuel tracking and versatile design

The IntelliSensor is CAN enabled and connects to most J1939 networks, so simply install it and begin tracking your fuel, transmitting collected diagnostic data to your electronic control module to calculate fuel usage. To change fuel measurement settings while a vehicle is in the field, just send a message to the IntelliSensor via your ECM.

The IntelliSensor can be mounted at multiple angles, at up to 45 degrees. It's appropriate for all vehicle types, even those with an irregular gas tank style or shape. You also can mount multiple IntelliSensors on a vehicle.

### Efficient fleet management

Using telematics to monitor and reduce fleet management costs? The IntelliSensor plays a key role in advanced data monitoring and continuous cost savings. Use it to track overall fuel consumption, or the efficiency of your operators and vehicles. The IntelliSensor can also help you document service data like running speed, engine heat, fuel reserves and peaks in fuel consumption. Using the CAN network, save your fleet data and manage it over time.

## CAN Bus SERIES of SOLUTIONS

The IntelliSensor is part of our full CAN Bus portfolio of products, including the maxAI series of displays and DATCON heavy-duty industrial gauges.



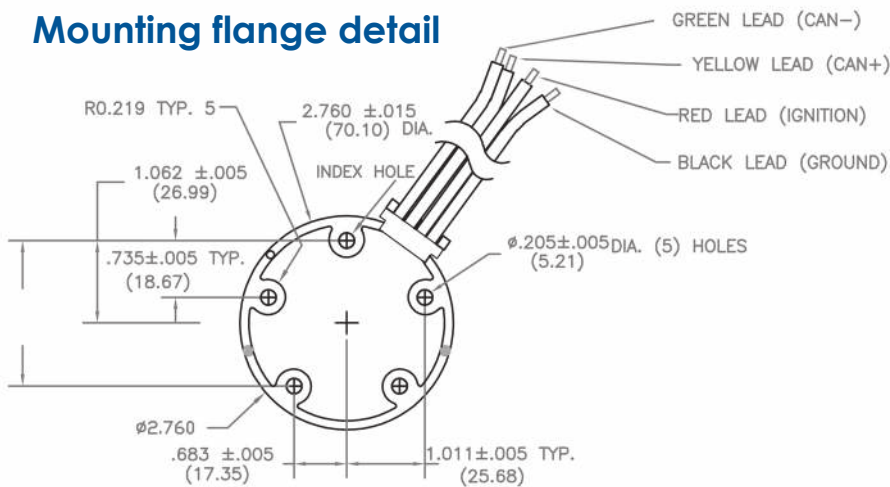
# IntelliSensor **PRODUCT SPECIFICATIONS**

Processing	
<b>Main processor</b>	Micro-controller based on ARM® Cortex® - M0 32-bit
<b>Storage</b>	Flash memory 64KB
<b>RAM</b>	Micro-controller internal RAM 16KB
Interfaces	
<b>Connection</b>	4-wire bare lead or Deutsch DT 4-pin: yellow (CAN+), green (CAN-), black (ground), red (ignition)
<b>CAN</b>	1 CAN, J1939 protocol, 250 Kbps baud rate by default Configurable to 500 Kbps, 250/500 Kbps auto-detectable
<b>PGN</b>	65276
<b>SPN</b>	96
<b>SA</b>	Dynamic
<b>Diagnostics</b>	DM1 message for fuel level and calibration errors
<b>Update rate</b>	2 seconds
<b>Operating voltage</b>	9-32VDC
<b>Electrical protection</b>	Reverse polarity and over-voltage
<b>Output accuracy</b>	+/- 3% as a linear function of fuel level
<b>Factory calibration</b>	Set to the dielectric value of diesel #2
<b>Auto-calibration</b>	If the tank is full (1.5 in. or 38 mm from the bottom of the mounting flange), and fuel is within 0-50° C, the fuel will contact the sensor stud, and the IntelliSensor will auto-calibrate to the dielectric value.
<b>Fuel types</b>	Any hydrocarbon based liquids without water: Diesel #1, diesel #2, hydraulic, blended fuels, etc.
Software	
<b>Application software</b>	GUI-based configuration tool
Environment	
<b>IP class</b>	IP68
<b>EMC conformity</b>	ISO 13766-2
<b>CE certified</b>	Yes
<b>SAE standard</b>	Vibration, UV, salt spray and chemicals
<b>Temp. range</b>	-40 to 85° C
Installation	
<b>Mounting flange</b>	Glass-filled black PC/ABS, polyester
<b>Mechanical installation</b>	SAE five-hole flange, installs on existing tank holes. Minimum hole diameter for installation is 1.63 in. (41.4 mm).
<b>Mounting angle</b>	Up to 45 degrees
<b>Tank sealing</b>	6 PSI
<b>Sender tube</b>	Trivalent aluminum chrome plated, length varies by product
<b>Lengths (inches/cm)</b>	Standard lengths: 6 to 36 in. (15 to 91 cm) in 0.5 in. intervals. Custom lengths available upon request.
<b>Weight</b>	Varies by length of sender
<b>Clearance from sender to tank bottom</b>	0.75 in. (19 mm)

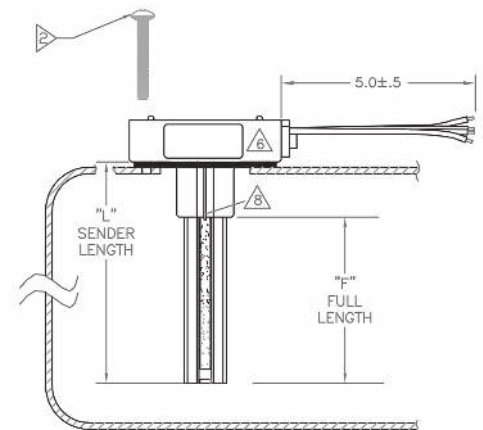
# THE DIFFERENCE IS IN THE DETAILS

Welcome to a new level in fuel sensing.

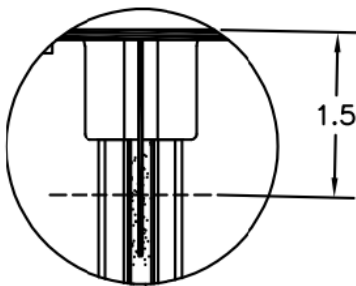
## Mounting flange detail



## Sender geometry



## Auto-calibration pin



maximatecc specializes in operator-machine interface solutions for critical environments. We support industrial machinery OEMs and partners globally with a broad portfolio of products and services. Through technology, engineering expertise and operational excellence, we make machines smart, safe and productive.

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