



The 7660 Tactical Fuel Gauge (TFG) is a rugged sensor for measuring pressure and temperature in military and expeditionary collapsible storage tanks (CSTs). It provides queried or continuous pressure and temperature measurements of fuel stored in collapsible tanks for accurate and reliable 24/7 inventory management.



## 7660 Tactical Fuel Gauge

# Specialized level measurement device for collapsible storage tanks.

### **Reliable and Repeatable Automated Inventory Management**

The primary component of the TacFuels® solution, the 7660 TFG helps improve the accountability process of tactical or expeditionary fuel points with CST farms. The 7660 TFG automates the measurement of fuel inventories to reduce the errors associated with manual measurement. Integrated with the FuelsManager® Inventory Management and Accounting applications, the complete solution becomes a reliable method to baseline inventory and track fuel movements for better asset visibility and operational control.

### **Key Benefits**

- Simple installation direct replacement for an existing collapsible tank vent pipe
- Rugged design makes it suitable for harsh environments
- All power and communications cables are connected via military style quick connects/disconnects.
- Precision digital measurement
- Approved for use in hazardous areas



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### 7660 Tactical Tank Gauge

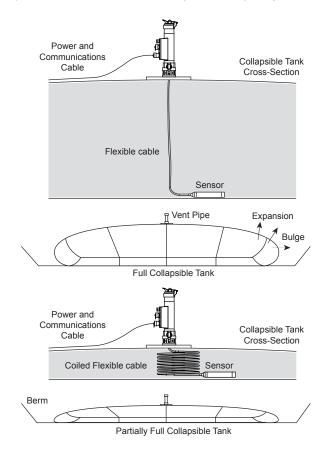
Specialized level measurement device for collapsible storage tanks.

### Installation

The 7660 TFG can be installed in minutes. First, remove the existing vent pipe and feed the integrated sensor into the collapsible tank until it is resting on the bottom of the tank. Then, fasten down the 7660 TFG vent pipe coupling. Lastly, connect the power/ communications cable to the quick disconnect point on the vent pipe.

### **System Configuration and Operation**

Power and communications can be "daisy chained" together and terminated at the 8240 Tactical Data Unit (TDU) for up to four 7660 TFGs. The 8240 TDU polls each connected 7660 TFG in turn for measurement data, performs calculations and provides complete tank inventory information to the TacFuels system computing device.







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### QUICK SPECS

Data Transmission Protocol: 4-20 mA (HART)

**Environmental Operating Temperature:**  $-4 \degree F$  to  $+140 \degree F$  ( $-20 \degree C$  to  $+60 \degree C$ )

**Power Required:** 8 - 36 VDC

**Power Consumption:** 4 mA

#### Pressure Measurement Ranges:

1.45 psig (0.1 bar) to 218 psig (15 bar) 2.9 psig (0.2 bar) to 290 psig (20 bar) ≤ 5.8 psig (0.4 bar) to 363 psig (25 bar)

Sensor Element Type: Integrated resistance thermometer Pt 100 according to DIN EN 60751

Temperature Measurement Range: -4 to +176  $^{\circ}\text{F}$  (-20 to +80  $^{\circ}\text{C}$ )

Sensor Element Dimensions: 1.25Ø x 7.5″ long - 13′ cable (32Ø x 190 mm long - 4.3 m cable)

Sensor Element Protection: IP 68 (30 bar)

Hazardous Area Approvals: ISA/CSA Standards - Class 1 Division 2, Groups C and D ATEX and IECEX Standor

Groups C and D ATEX and IECEx Standards - Ex II 3(1)G EX nA [ia Ga] IIB T5 Gc (-40  $^\circ\text{C},$  Ta, 85  $^\circ\text{C})$