## 6 or 12 Fully Programmable Non-Isolated Analog Outputs



12-channel version shown

# **Product Description**

The TMS series analog output card is a plug-in option for the TMS Series Tank Management Systems which provides either six (6) or twelve (12) channels of non-isolated current loop output data, globally selectable for 0-20 mA, 0-24 mA or 4-20 mA ranges. These outputs can be connected to most programmable logic controllers, building management systems, and similar analog input monitoring devices to provide continuous tank data without the need for communications protocol support. Each current loop channel is field programmable by tank number and data type, including gross volume, net volume, product level, water level and product temperature. If desired, voltage outputs, for example 0-5 V, 1-5 V or 0-10 V can easily be configured using an external resistor. The TMS series analog output board requires no calibration and provides full-scale accuracy better than +/- 0.05% of full scale.

### **Specifications**

• Output Capacity: 6 or 12 channels

DC Output Modes: Non-isolated 4-20 mA, 0-20 mA, 0-24 mA, 0-5 V, 1-5 V or 0-10 V

• Resolution: 15-bit

Accuracy: Better than +/- 0.05% of full scale
Operating Temperature: -40 °F to +175 °F (-40 °C to +80 °C)

Output Data: Each output programmable by tank channel and output data, including Gross or Net Product Volume,

Product or Water Level, or Product Temperature

Maximum Wire Gauge: 20 AWG solid conductor

Loop fault detection

• Uses one I/O Expansion Slot

Compatible with TMS2000, TMS2000W, TMS2000A1, TMS2000A2, TMS3000, TMS4000, and TMS4000W

#### Installation

The Analog Output Card uses the TMS2000/TMS2000W/TMS2000A1/TMS2000A2 non-hazardous I/O Expansion position or the TMS3000/TMS4000/TMS4000W non-hazardous I/O Expansion slot 2. Refer to Bulletin 139 for detailed information.

#### **Model Numbers**

•	900496-1	TMS3000, TMS4000, TMS4000W, 6 non-isolated Output Channels
•	900496-2	TMS3000, TMS4000, TMS4000W, 12 non-isolated Output Channels
•	900497-1	TMS2000, TMS2000W, TMS2000A1, TMS2000A2, 6 non-isolated Output Channels
•	900497-2	TMS2000 TMS2000W TMS2000A1 TMS2000A2 12 non-isolated Output Channels

