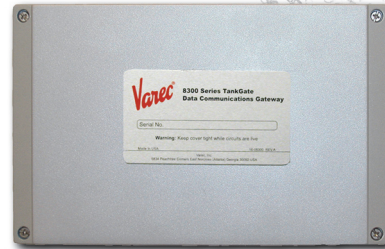# 8300 TankGate Interface

Collect and transmit data from multiple storage tanks to a central system or host using a single tank gauge interface

Highlights

- Connects to various manufacturers' instruments through industry standard protocols - reducing equipment required for a single system

- Fully compatible with FuelsManager® - tank inventory management made easy

- 8300 TGI and tank gauging instrument configuration data can be exported to other applications, such as Microsoft Excel® or Access® - documenting all tank gauge equipment

- All information obtained can be communicated to the host system for inventory, alarm and control purposes through the industry standard MODBUS™ protocol

Installation Guidelines

The 8300 TGI can be installed in a variety of industrial environments when placed in an optional NEMA 4 Enclosure.

Applications

The 8300 series TankGate Interface (TGI) acts as a tank gauge interface for data acquisition and host gateway for tank farm, pipeline or refinery applications. Through the use of plug-in interface modules, the 8300 TGI can receive various types of measured data from tank gauging instruments, such as level, temperature, density, water level or alarms.

Configuration and Programming

Remote programming can be accomplished from the host or locally using a PC with the Windows based configuration program ViewRTU. This tool simplifies configuration and diagnostics, allowing uploading of final equipment configurations. Reports can also be generated via a built-in function to assist in documentation
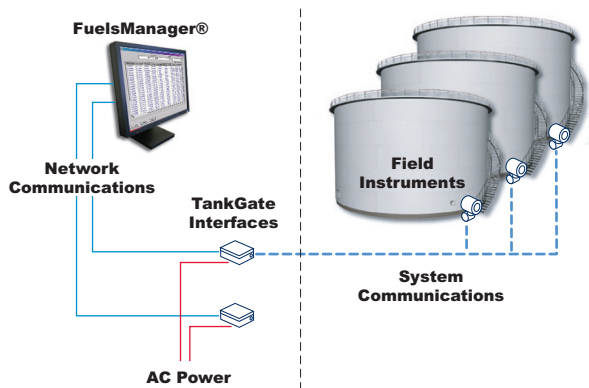
Technical Specifications

Operating Conditions

Operating temperature	-40 °F to +158 °F (-40 °C to +70 °C)
Humidity	5 to 95% (non-condensing)

Host Communication

Ports	2
Type	Com #0 : RS-232C Com #1 : RS-232C / RS-485
Baud rate	9600 baud
Protocol	MODBUS™ and E+H RTU protocol
Mode	RTU mode, master and slave
Media access	Master/Slave

Power

Supply voltage	100 to 240 VAC 50/60Hz
Power consumption	50 VA max. @ 110/220 VAC (500 mA)
Surge protection	ANSI/IEEE standards Gas Discharge Tubes (GDTs) and clamping diodes on all field inputs, power supply inputs and communications channels

Mechanical Construction

Dimensions	8.03 in x 5.51 in x 2.80 in (204 mm x 140 mm x 71 mm)
Material	Aluminum powder coated
Mounting	Wall mounted
Terminals	Plug-in type with screw connections

Certifications and Approval

CE

Optional Enclosures

Order Code	Description
140061563	16x16x6 in.
140061214	16x16x6 in. with 48VDC supply

*Gauge dependent

Order Codes

10			Interface Module
	032		Dual RS-485 MODBUS™ Communications Interface Module
	036		Dual RS-485 GSI ASCII Communications Interface Module
	101		Varec Mark/Space Micro 4-wire (Varec 1800, 1900, 6500) Interface Module
	111		Current Loop (Whessoe Bus) Interface Module
	112		Current Loop (GPE) Interface Module
	120		SAAB (TRL/2) Interface Module
	140		Enraf (811, 802/812, 854, 873) Interface Module
	150		L&J Tankway (MCG 1000, MCG 1500, MCG 2000) Interface Module
	161		Prime Measurement (3500 ATG) Interface Module
	171		Dual RS-232 Veeder Root (TLS 350) Interface Module
20			**Enclosure**
	A		No Enclosure (Note 1)
	B		16x16x6 inch NEMA 4 enclosure
30			**Power Supply**
		0	No DC Power Supply (Note 1, 2)
		1	120VAC input, 48VDC, 1 Amp Power Supply (Note 3)
		2	240VAC input, 48VDC, 1 Amp Power Supply (Note 3)
		3	120VAC input, 24VDC, 1 Amp Power Supply (Note 3, 4)
		4	240VAC input, 24VDC , 1 Amp Power Supply (Note 3, 4)
N83			Complete product designation

1: If 'No Enclosure' is selected, then 'No DC Power Supply' must be selected.
2: Not available for Mark/Space or Current Loop Interface Modules unless 'No Enclosure' option selected
3: Not available for SAAB, Enraf, L&J Tankway, Prime Measurement, or Veeder Root (TLS 350) Interface Modules
4: Only available with Dual RS 485 Interface Modules with enclosure