

9810

Mini Remote Terminal Unit (miniRTU)

For terminal operators, facility engineers, and EPCs at small-to-medium tank farms who need Ethernet and OPC UA connectivity for existing float & tape, servo, and radar gauge installations without cabinet redesign or gauge replacement, the 9810 miniRTU delivers native OPC UA and Modbus TCP host output for up to 32 tanks in a chassis that installs directly in the footprint of a legacy Varec 8300 TGI. Protocol family versions support Honeywell Enraf GPU/BPM, Varec Mark/Space, L&J Tankway, Veeder-Root/Ronan serial, Endress+Hauser serial, Hectronic HLS, and serial Modbus. Unlike full modular RTUs, the 9810 is the right-sized integration gateway with ANSI/IEEE surge protection, US/Canada/IECEE/CE approvals, native API volume calculations, FuelsManager® compatibility, and remote OPC UA configuration and file transfer that minimize on-site commissioning time.



Key Features

Compact Drop-In Upgrade

Designed with the same footprint as legacy 8300 TGI units, the 9810 installs quickly without cabinet modifications, rewiring, or prolonged downtime—streamlining modernization projects.

Built In Native OPC UA

The unit provides network connectivity using native OPC UA and Modbus TCP, enabling real-time data exchange with SCADA, HMI, and enterprise systems.

Multi-Protocol Interoperability

The 9810 miniRTU communicates with gauges from multiple manufacturers - including Honeywell Enraf, Veeder-Root, Ronan, Hectronic, and L&J - and supports serial, GPU/BPM, Mark/Space, and Tankway interfaces. This allows integration without replacing existing field instruments.

Optimized Scale for Small Sites

Purpose built for smaller tank farms, the platform is optimized to support up to 32 tanks, avoiding the cost, size, and complexity associated with full-scale RTUs designed for large terminals.

ANSI/IEEE Surge Protection

Integrated surge protection- meeting ANSI/IEEE electrical standards - safeguards critical electronics from field electrical disturbances, ensuring long term system reliability in industrial and defense environments.

Remote Configuration & Diagnostics

Through any OPC UA client, the system supports remote configuration, diagnostics, and file transfers, reducing the need for time-consuming and costly site visits.



Typical Applications



SMALL TANK FARM UPGRADES

A cost-efficient alternative to large RTUs, perfectly scaled for small-to-midsized facilities.



LEGACY 8300 TGI RETROFITS

Drops directly into the 8300 footprint for immediate Ethernet and OPC UA modernization.



AVIATION FUEL MONITORING

Unifies mixed aviation gauge fleets for secure, mission critical visibility.



INDUSTRIAL STORAGE CENTRALIZATION

Aggregates float-and-tape, servo/radar, and temperature data into one interface.



SCADA PROTOCOL MODERNIZATION

Converts legacy protocols to OPC UA/Modbus TCP to modernize plant connectivity.



DEFENSE FUEL OPERATIONS

Built-in surge protection and global approvals support strict defense grade reliability.

Benefits



Eliminates Cabinet Redesigns

Matches the 8300 TGI dimensions for frictionless retrofits.



Avoids Gauge Rip-and-Replace Project

Multiprotocol support allows legacy Enraf, Varec, L&J, and other devices to remain in service.



Optimizes Budgets for Small Sites

Supports up to 32 tanks- avoiding the cost and complexity of large-scale RTUs.



Enables Remote Configuration

Supports remote file transfers and diagnostics through an OPC UA client.



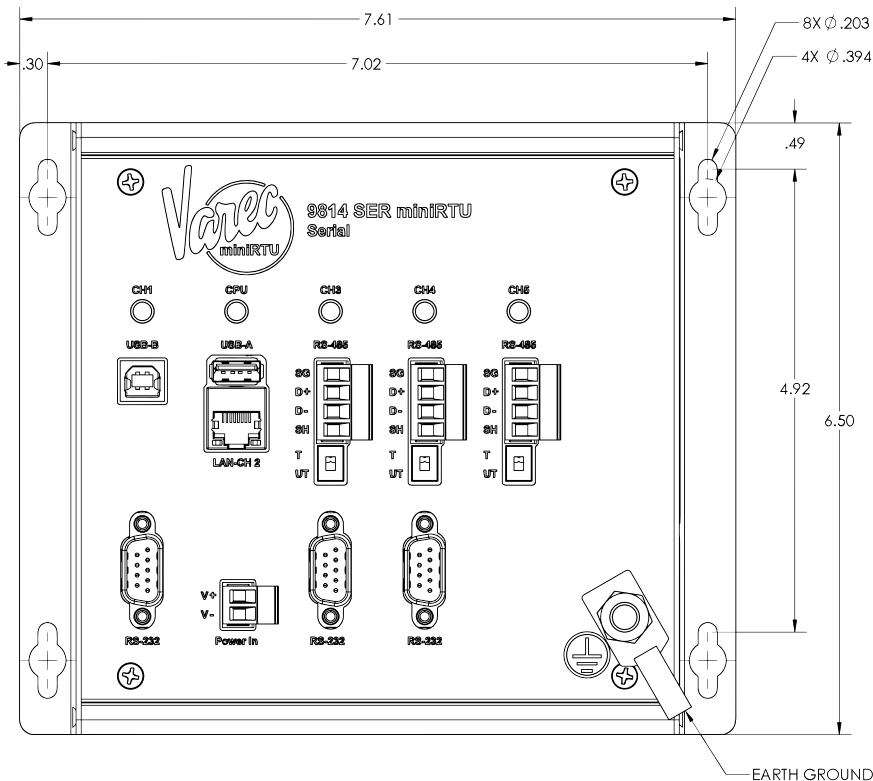
Ensures Long Term Field Reliability

ANSI/IEEE surge protected hardware shields critical electronics from field electrical events.

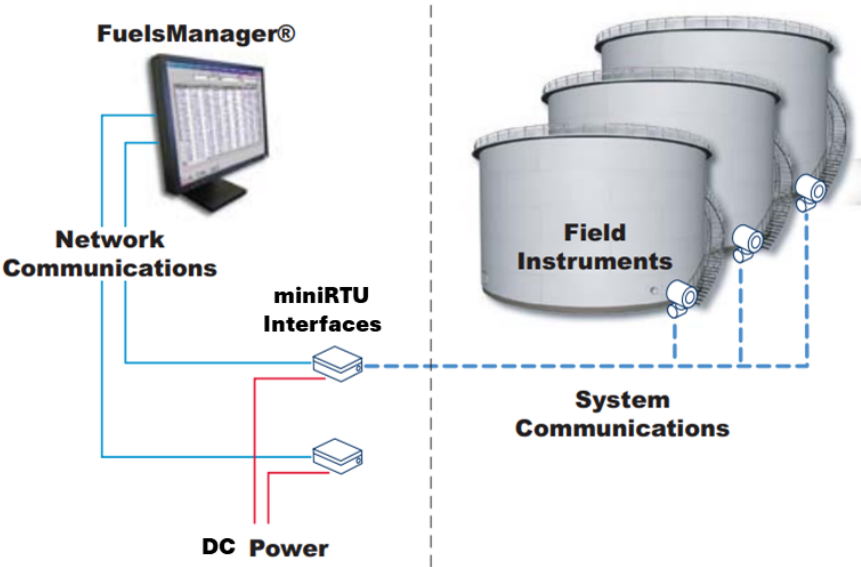
Technical Specifications

Specification	Details
Host Communications	OPC UA, Modbus TCP, Modbus over TCP, Serial RTU
Field Protocols	Honeywell Enraf GPU/BPM, Varec Mark/Space, L&J Tankway, Veeder-Root TLS, Hectronic HLS, Modbus Master/Slave
Capacity	Supports up to 32 tanks (varies by family module)
Protection & Approvals	ANSI/IEEE surge protection; US, Canada, IECEE, and CE approved
Configuration Tools	Remote configuration via OPC UA client or local legacy utilities; supports remote file transfers
Family Options	9812 Bi-Phase Mark, 9814 Serial, 9815 Mark/Space, 9816 Tankway
Serial Module	3× RS-485 or 2× RS-232 ports with RTU protocol support
GPU Bi-Phase Mark Module	Two BPM channels with individual surge protection for Enraf loops
Mark/Space Module	Dual connector interface for Varec and third-party Mark/Space devices
Tankway Module	Dual connector interface for L&J Tankway loops

Dimensions



Typical System Layout



Model Number Selection

9810 miniRTU

Part Number	Housing / Approvals
N9812	BPM -Bi-Phase Mark
N9814	SER - Serial
N9815	M/S - Mark/Space
N9816	TW - Tankway
A	Flange Mount
B	DIN Rail Mount

Summary

The 9810 miniRTU is the appropriate field gateway for small-to-medium petroleum terminals, aviation fuel sites, and industrial storage facilities that need Ethernet and OPC UA connectivity for existing gauge installations without the scale or cost of a full modular RTU. Its drop-in compatibility with the legacy 8300 TGI footprint eliminates cabinet redesign, its multi-protocol family versions retain installed Enraf, Varec, Veeder-Root, Endress+Hauser, and L&J field instruments, and its native OPC UA output connects directly to FuelsManager®, SCADA, and enterprise systems. Supporting up to 32 tanks with remote configuration and ANSI/IEEE surge protection, the 9810 delivers modern connectivity at the scale that small and mid-size facilities actually require.

info@cognesense.com

Tel: (708) 236-6000

5911 Butterfield Road Hillside, Illinois 60162 USA

This document is for information purposes only. All designs subject to change. Certified dimensions, specifications, and performance data available upon request