

DTGS Integrated Marine Tank Gauging System

A purpose designed modular, expandable, and simple to install solution



Key features

- Integrated and scalable Tank & Draught monitoring package for all Vessel Types
- Screen presentation is defined for each application for maximum clarity with specific layouts for Tank Contents and Draught
- Small space efficient design with both panel and wall mount display options
- Ethernet interconnection for multiple repeater display options
- Serial output data to other shipboard systems
- Multi-drop serial interconnection means simple cabling with reduced cost and complexity
- Marine Type Approved and Intrinsically Safe Certified



DTGS A Flexible and Scalable Solution for Shipboard Tank Gauging

The VPM Display is at the heart of the PSM tank gauging system. It combines all functions of data acquisition, data processing, local display, and remote reporting.

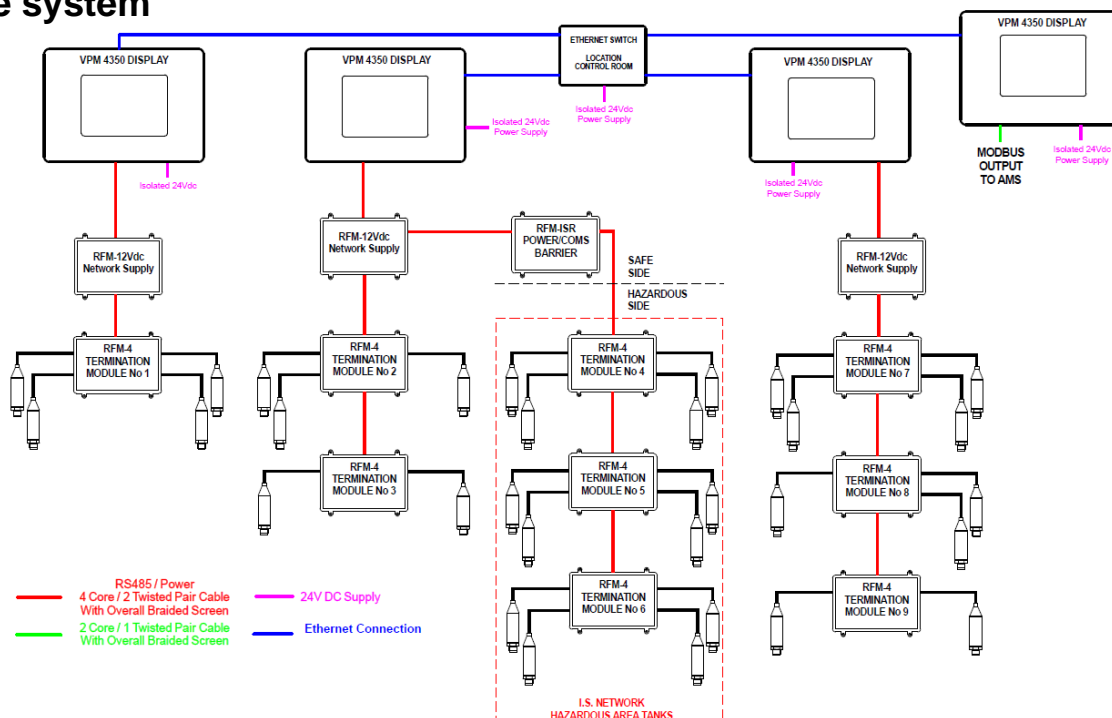
Tank levels are collected from PSM APT1000 level transmitters via an RS485 multi-drop connection, via industry standard Modbus RTU protocol. This RS485 network is built up using PSM's RFM4 termination modules to realise a system with minimal cabling. Just one 4 core cable carries both power and communication signals across the entire network.

The VPM has three independent RS485 ports allowing 3 separate sensor networks to be connected. Between each RFM4 / APT1000 network and the VPM input port is an RFM-ISR Safety Barrier / Supply regulator. This unit provides both compliance with Intrinsic Safety regulations and a regulated supply to the sensor network.

Optional input modules also allow for connection of conventional signals type, e.g. 4-20mA, PT100, or volt-free contacts for status or alarm conditions.

All system elements are Marine Type Approved

Example system



Screen Presentation is designed for clarity of information and is tailored for each installation with specific input / tank names, units of measure, status etc. Data is arranged in "groups" immediately accessible via dedicated on-screen buttons.

Systems incorporating draught, trim, and heel monitoring have a dedicated display layout.

The system may be supplied fully configured with all data loaded for its intended application. All configuration is user editable via the touchscreen if changes are required. Password protection ensures that only authorised personnel can make changes.

A complete system configuration can also be uploaded / updated via a temporarily connected USB memory device.

Multiple VPM's may be directly interconnected via Ethernet. Each can share information so that data collected by one VPM is available for display by the others, with each VPM having its own screen layouts

For local alarm annunciation VPM features four configurable relay outputs to connect to external visual and audible devices.

A separate RS485 port allows a complete customizable Modbus Map of all parameters to be output to other shipboard systems.

Inbuilt diagnostic tools allow for monitoring of network performance, fault diagnosis and configuration of replacement input sensors.