

Rosemount 2460 with Emulation Functionality Improves Tank Data Communication

Results

- Modern, trouble-free Ethernet and serial communication of tank gauging data implemented
- Seamless replacement of obsolete communication equipment
- Installation and start-up with only a few hours downtime



Application

Tank gauging data communication from measurement devices to host system and PLC.

Customer

Tank terminal owned by leading sugar cane ethanol manufacturer in Brazil.

Challenge

The customer company is one of the country's largest fuel distributors. All their plants are automated and the goal is to improve efficiency on a regular basis.

This site is equipped with legacy tank gauging equipment including CIU 858 communication interface units and Enraf® 811 servo gauges. Data communication between tank gauging field devices and the existing host system is based on the Enraf GPU protocol. The technical support for these old CIU 858 interface units was lacking. Spare parts were expensive or not available at all, making the terminal very vulnerable to device faults. On top of that, the existing CIU didn't offer the possibility of integration with modern automation equipment and host systems.

Solution

Due to lack of support for the product, the terminal decided to replace the existing CIU.

Emerson offered its Rosemount™ 2460 System Hub with Enraf GPU emulation. The Rosemount 2460 was able to emulate the serial Enraf GPU protocol communication with both existing Enraf servo gauges and the host system. No changes in the servo gauges or in the host system were required.

The system hub also allowed integration with a Schneider M340 PLC system using Modbus® TCP (Ethernet) communication. The Rosemount 2460 also enables future communication updates, redundancy capability, plus inventory management calculations.

“We are saving money by having reliable communication of tank gauging data to our host systems.”



Before: With Legacy communication unit



After: Newly installed Rosemount 2460

The transition from the existing CIU 858 to the Rosemount system hub was straightforward with minimum impact on the system and only four hours of downtime.

On the same day the Rosemount 2460 system hub had been fully installed and commissioned for a third-party system integrator to work on the Modbus TCP integration of the device with the Schneider M340 PLC.

The customer now benefits from a modern, future-proof communications device fully supported by Emerson. There is no longer any need to risk operational disturbances from obsolete data communication equipment.

Resources

Rosemount 2460 System Hub

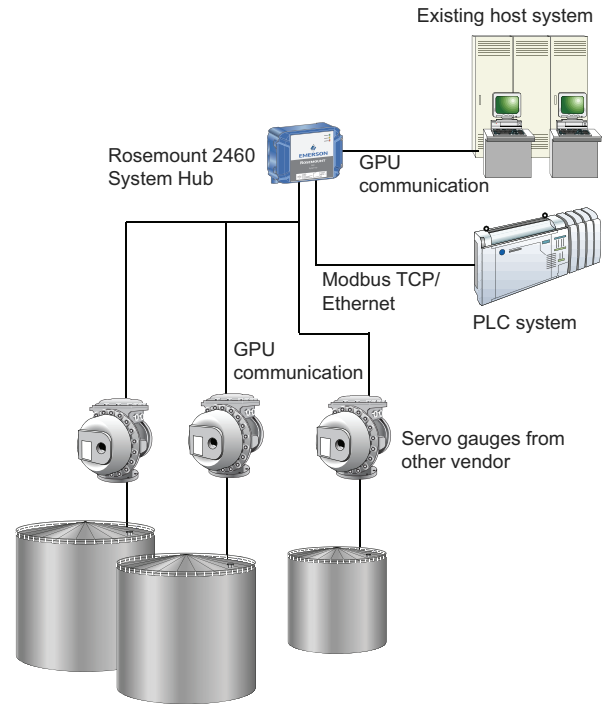
[Emerson.com/Rosemount2460](https://emerson.com/Rosemount2460)

Tank Gauging Emulation

[Emerson.com/TankGaugingEmulation](https://emerson.com/TankGaugingEmulation)

System Data Sheet

[Rosemount Tank Gauging System](https://emerson.com/Rosemount-TankGauging-System-Data-Sheet)



The system hub emulates both the previously installed field bus and the control room bus.

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