

Realflo Configuration and Product Training

Telemetry & Remote SCADA Solutions

One Day Training Session

Training Course Overview

This one day course is designed to give each participant an introduction to the Realflo 6 user interface, including both Maintenance Mode and Expert Mode. A basic understanding of Telepace programming is useful but not required. The knowledge gained from this course will enable the participants to successfully configure, install and maintain Realflo gas flow computers and 4000 Series transmitters.

SCADAPack and 4000 Series Hardware

The installation, operation and maintenance of the SCADAPack controller are discussed and demonstrated, as required for Realflo. Hardware aspects of the controller and multi-variable transmitter will be explained to give the participant a working knowledge of the communications and I/O wiring, controller configuration and power supply issues.

Realflo Gas Flow Computer Configuration

Begins with an introduction to the user interface, including Maintenance and Expert modes. How to find which flow computer version is in a controller, and how to download a new flow computer C program. Setting of the Real-Time Clock in Realflo. Basic configuration of the flow computer, including number of flow runs, controller type, AGA3 configuration for orifice plate, and AGA8 compressibility configuration.

Reading and interpreting logs and history files is demonstrated. Making a backup copy of the configuration files is discussed. Writing a configuration to a flow computer, reading from a flow computer, and backing up files.

A sample Realflo configuration will be developed to demonstrate the features of Realflo. A 4102MMT will be used in a configuration. This will demonstrate how to search for and configure a transmitter, how to integrate it into the flow computer, and how to calibrate it.

Telepace Ladder Logic Software

Interfacing issues between the Telepace ladder logic software and Realflo will be discussed. A sample program to remotely configure the flow computer via Telepace will be demonstrated. Issues related to the Real Time Clock will be explained.

Notes

- It is recommended that as a minimum requirement each participant have a PC with a minimum of a Pentium 4 processor and have Windows 2000 or newer installed.
- Each PC must have a DB9 serial port and a CD-ROM drive.

Training Course Schedule

Note that the times below are for reference only. Timing and subject material may be modified for individual courses.

- 08:00 - 09:10 Introductions and distribution of course materials
Outline course schedule and topics to be covered during the course
SCADAPack & transmitter hardware introduction and the Hardware Manual
- 09:10 – 09:25 Break
- 09:25 - 10:35 Introduction to the Realflo programming interface, Maintenance & Expert modes
Downloading a flow computer and setting the Real-Time Clock
Flow Computer Setup and Flow Computer Information
- 10:35 - 10:50 Break
- 10:50 - 12:00 Configuring a flow run using the AGA3 and AGA8 calculations
Discuss and view the AGA7 and V-Cone configurations
Simulating a flow run using Custom View data
- 12:00 – 13:00 Lunch Break
- 13:00 – 14:00 Configuration and troubleshooting of a 4102 MMT using the 4000 SeriesConfigurator software
Discuss RS-485 network configurations and the RS-232/485 converter
RS-485 network troubleshooting
- 14:00 - 14:15 Break
- 14:15 – 15:15 Configure a flow run to use a 4102MMT
Search for and configure the 4102 in Realflo
Calibrate the 4102MMT transmitter through Realflo
Changing an orifice plate and forcing inputs
- 15:15 – 15:30 Break
- 15:30 – 16:30 Reading and interpreting Hourly and Daily history, Event and Alarm Logs
Interfacing Telepace and Realflo via Modbus registers
Setting the Real Time Clock correctly to avoid invalid flow history
Backing up Realflo configuration files