

ControlWave® GFC Plus Flow Computer Integrated Automation and Measurement Solution

Features

For users who expect more from their flow computers than simply chart replacement functionality, ControlWave® GFC Plus, from Emerson Process Management, comes through with synergy of automation and measurement. Now you can install a single instrument without the hassles you face when you try to use separate equipment for automation and measurement operations at remote sites.

A single integrated package includes the following:

- ControlWave family platform that is pre-programmed to meet API 21.1 requirements for a two-run metering and regulating station
- Integral LCD and optional 25-key keypad that allows operators to change configurable parameters, on site, without packing a PC
- High-performance sensor assembly is a separate component that can be removed and replaced independently of the electronics platform
- Optional pre-installed RTD assembly
- Wide variety of solar and battery power systems to best meet a range of applications needs—and extremely low power consumption keeps power systems costs under control
- Open communication and a broad selection of modem and wireless communication options to best suit your networking needs
- I/O complements interface with external process equipment
- Class I, Division 2 NI hazardous area approval

Unlike a flow computer, ControlWave GFC Plus employs a hardware/firmware platform that readily handles automation tasks:

- Ample processing horsepower means that users need not worry about running out of resources for demanding applications



ControlWave GFC Plus includes a smart gauge pressure or DP/P/T sensor assembly, battery/solar power system and a broad selection of modem and radio communications options.

- Multitasking kernel securely manages multiple automation, communication, and measurement operations
- For users wishing to write their own programs or modify ours, we offer a complete IEC 61131-3 programming environment with full support from Emerson available every step of the way

After more than 90 years in process control and 115 years in measurement, Emerson remains committed to delivering superior life cycle economics to automation and measurement systems, today and tomorrow. We are proud to offer ControlWave GFC Plus, a product that stands up to the tradition.

Remote Automation Solutions

Product Overview

1660ov4b / D351480X012

October 2011 - Page 2

ControlWave GFC Plus Flow Compter

ControlWave GFC Plus at a Glance

Base Configuration:

- Integral electronics assembly with the following major components:
 - ARM9 CPU platform
 - RS 232 Serial Local Port and Network port
 - Third serial port, RS 485
 - DC/DC section accepts nominal 6 Vdc or 12 Vdc input power
 - Display/keypad interface
 - Dedicated interface for DP/P transducer assembly
 - Three-wire RTD interface
 - 2 DI/ pulse input points
 - Switch output for operation of auxiliary devices such as a radio
- Pre-loaded application program for a 2-meter run M&R station
- Weatherproof Lexan housing: 14.5" H x 12" W x 8.5" D

Selection Options:

- I/O selections:
 - 2 DI/DO, 4 DI, 2 DO, 2 high-speed counter inputs
 - 2 DI/DO, 4 DI, 2 DO, 2 high-speed counter inputs, plus 3 AI
 - 2 DI/DO, 4 DI, 2 DO, 2 high-speed counter inputs, plus 3 AI and 1 AO

- Display/Keypad Options:
 - 2-line LCD with 2 pushbuttons or no pushbuttons
 - 4-line LCD with 25-key keypad
- Hazardous area approval – Class I, Division 2
- Internal power systems selections are as follows:
 - Single, 7.2 V lithium battery
 - 12 V, 35 Ah lead acid cell battery with 30 or 40 Watt solar panel
- Emerson's sensor assembly, which provides measurement of differential pressure and gauge pressure is available in the following ranges:
 - Gauge pressure ranges of: 100" (inches H2O), 25 psi, 100 psi, 300 psi, 1000 psi, 2000 psi, 3000 psi, 4000 psi, and 5000 psi
 - DP/P (Differential Pressure/Pressure) ranges of: 150" / 1000 psi, 150" / 2000 psi, 300" / 1000 psi, 300" / 2000 psi, 300" / 3000 psi, 300" / 4000 psi, 25 psid / 2000 psi, 25 psid / 3000 psi, and 25 psid / 4000 psi
- Bendable RTD assembly, pre-wired, available with cable length of 6 feet, 15 feet or 25 feet
- Thermowell, available in insertion lengths of 2 ½", 4 ½" and 7 ½"
- Standard model modem or radio, installed on an internal plate and connected to the network port (RS 232)
- Polyphaser surge suppressor for radio
- 24Vdc Loop Power Supply
- Relay Output Board
- Power Distribution Board

© 2007-2011 Remote Automation Solutions, division of Emerson Process Management. All rights reserved.

Bristol, Inc., Bristol Canada, BBI SA de CV and Emerson Process Management Ltd, Remote Automation Solutions division (UK), are wholly owned subsidiaries of Emerson Electric Co. doing business as Remote Automation Solutions, a division of Emerson Process Management. FloBoss, ROCLINK, Bristol, Bristol Babcock, ControlWave, TeleFlow and Hellicoid are trademarks of Remote Automation Solutions. AMS, PlantWeb and the PlantWeb logo are marks of Emerson Electric Co. The Emerson logo is a trademark and service mark of the Emerson Electric Co. All other marks are property of their respective owners.

The contents of this publication are presented for informational purposes only. While every effort has been made to ensure informational accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. Remote Automation Solutions reserves the right to modify or improve the designs or specifications of such products at any time without notice. All sales are governed by Remote Automation Solutions' terms and conditions which are available upon request. Remote Automation Solutions does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Remote Automation Solutions product remains solely with the purchaser and end-user.

Emerson Process Management Remote Automation Solutions

Watertown, CT 06795 USA

Mississauga, ON 06795 Canada

Worcester WR3 8YB UK

T 1 (860) 945-2200

T 1 (905) 362-0880

T 44 (1) 905-856950

Website: www.EmersonProcess.com/Remote

