

FLOW COMPUTER SFC-3000



The best way to predict the future is to create it

Introduction to SFC3000



The SFC3000 is far more than just a dedicated flow computer. It can operate on a number of levels from a supervisory machine to a stand alone flow computer or as a system component. With its touch screen, VGA display and extensive processing capabilities, combined with simple to use controls and unique operating software it can function as a complete station supervisor integrated into a flow computer housing. Designed specifically to meet the needs of the world wide liquid hydrocarbon and gas measurement markets, the SFC3000 is intended to positively contribute to both management and conservation of the worlds dwindling energy resources by providing both versatile and accurate measurement and incorporating state of the art designs and components.

Functionality

Measurement conforming to AGA, ISO, API standards of:

- Dry and Wet Natural Gas
- Hydrocarbon Liquids
- Other Gases e.g. Nitrogen
- Other Gases e.g. Water
- Individual stream I/O boards, 1 to 5 fiscal streams
- Using Meter types:
 - Pulse generating flow meters
 - Most common Ultrasonic flow meters
 - DP transmitters with Orifice or Venturi measurement

Features

- Stand alone flow computing function
- Flow Computing combined with supervisory function
- Up to 2Gb memory for Alarm, Audit and Data logging
- Easy installation and interfacing
- Extremely accurate
- Interfaces to most types of metering equipment and all popular GC's
- Free Configurable Display"
 - System Diagrams
 - Trending and graphical displays
 - Language options

Rear Panel

- Field Connections PSU and I/O
- Security Mode switches and Memory Card

Approvals

Designed to comply with:

- MID European approval
- API chp. 21, OIML R117
- NMI Metrology requirement

Meter types

- Turbine, Rotary, Positive Displacement
 - High & Low Frequency pulses
 - Encoder type
- Ultrasonic Meter
 - Pulse Counting type
 - Serial Communication Interface
- Differential Pressure Measurement
 - Orifice, Venturi, V cone
- Coriolis Meter



Front Panel

- Display
 - High Res. 5.7" VGA Color with Touch Panel
- 360 Rotary Control for menu navigation
- High Brightness Indicator LED's
- Front Panel USB connection
 - Configuration & Programming
 - Local Data Downloading & Diagnostics



Overall

- Chassis Half width 3U high 19"
 - Panel or Chassis Mount
 - Dimensions HxWxD 130 x 210 x 240mm
 - Accommodates up to 6 user plug-in cards
 - Up to 10 streams in same chassis
 - Mixture of metering types in same chassis
- Power supply
 - Supply voltage 20 to 21 VDC, 30W
 - Auxiliary Outputs 24V, 500mA
- Operating
 - Operating Temperature 0°C to 55°C
 - Storage Temperature 0°C to 55°C
 - Humidity to 90% non condensing
 - Weight approximately 2.0 kg / 4.5 lbs



Capability

- Up to 5 I/O cards can be fitted in the SFC3000 chassis providing a 5 stream fiscal capability.
- Local configuration and data downloading is achieved using the supplied Windows* software, through the dedicated front panel high speed USB communication port.
- Remote communication is via the communication card, with RS232/485 serial capability and Ethernet 10/100 connectivity. Multiple communication cards can be installed.
- The versatile Stream I/O Board fits all measurement application types and supports the use of standard meters such as Ultrasonic, Turbine, Orifice and Coriolis.

Calculations

- Dry and Wet Natural Gas
 - ISO 5167, AGA 3, AGA 8, AGA 10
 - ISO 6976, PTZ, NX19, SGERG or Direct Density
- Other Gases
 - Nitrogen, Stream, CO2 Emission Calculations
- Liquids
 - API 11.2.1, API 11.2.2 tables 53A & 54A
- Provers
 - Bi-Directional Ball Prober
 - Master Meter
 - Dual Chronometry

Supervisory Features

- Alarm/Event/Data logging and recording
- Printer report generation
- System Diagram display
- Network Communication
- Station Controller Functions
- Valve Control and remote operation
- Maintenance Functions
- Stream Summation
- PID/Sampler Functions

About us

Flow Meter Group B.V. (FMG)

FMG is an engineering/manufacturing company specializing in the development and production of energy and gas measurement systems. Located in the Netherlands, FMG produces a wide range of rotary and turbine gas meters, volume conversion devices, master meters and calibration benches. Unique product features include self diagnosis and tamper prevention. All products and services are certified by the Dutch NMI and comply with the latest EU and/or OIML directives.

Flow Meters

FMG offers a large variety of flow meters ranging from very small (100 dm³/h) up to very large (40.000 m³/h) flow rates and in pressures from atmospheric to 100 bar (1440 psi). All FMG meters comply with international safety and metrological standards. Meters designated for fiscal use are tested, certified and approved by the Netherlands Metrological Institute NMI.

FMG has added extra features to the meters in terms of increased accuracy, protection from manipulation, increased rangeability and superior performance in order to go beyond the minimum requirements of the existing standards.



Positive Displacement Meters



Master Meters



Custody Transfer Short Length Turbine Meters



Turbine Meter Series FMT-Lx



Test Benches

Contact



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