

NUFLO™

# MC-II™ Plus Explosion Proof (EXP) Flow Analyzer

The NuFlo™ MC-II™ Plus EXP Flow provides a more robust option for calculating and displaying instantaneous flow rates and accumulated totals based on a turbine flow meter input signal. It combines ease-of-use and functionality for a truly user-friendly totalizer.

The liquid crystal display simultaneously displays seven-digit totals and six-digit rates, as well as a selection of commonly used engineering units for rate and volume. The calibration is implemented by entering the calibration factor of the flow meter and selecting the desired units of measurement. It automatically calculates its own divisor. It is that simple. It even lets you input gas calculation parameters and self-calculates the calibration factor for gas in standard cubic feet. The unique combination of inputs and outputs allows flexibility of use in the field. The MC-II™ Plus EXP Flow Analyzer connects to a turbine meter using quick disconnects. It takes the turbine meter signal directly in, without the use of pre-amplifiers. A remote reset input allows the total to be cleared from a remote computer. The user can select either a 4-20 mA output or an amplified flow meter frequency output which may be used by remote equipment to calculate flow rates and volume. This explosion proof instrument is an all-in-one instrument. It is truly the next generation of the MC-II™.

## Features

### Magnetic Pickup Input

- Simultaneous Indication of Rate and Volume
- 7-Digit Volume, 6-Digit Rate
- Analog Output – Loop Powered
- Volumetric Pulse Output – Optically Isolated

### Display

- 7-Digits for Total
- 6-Digits for Rate
- Character Height – 0.300-in.
- Update Period: 2 seconds
- Units of Measurement
  - BBL, GAL, M3, and MCF for Volume



- BPD, GPM, M3/D, and MCF/D for Rate
- User Defined Units Implemented by Entering a Divisor and Rate Multiplier

## Calibration

### Liquid Flow Meter Calibration:

- User enters calibration factor of meter and selects units of measurement

### Gas Flow Meter Calibration:

- User enters calibration factor of meter, pressure and temperature parameters, and Fpv.

## Inputs

### Turbine Meters:

- Front Panel Keypad Configurable Sensitivity Adjustment
- Sensitivity Adjustment Range: 20 mV P-P to 120 mV P-P
- Frequency Range: 15 to 3500 Hz
- Frequency Measurement Accuracy: 0.015% of reading

## Remote Reset Input

- Optically Isolated (Bi-Directional) Input
- Supply Range: 3.0 - 30 VDC
- Minimum Contact Duration: 130 mS

## Outputs

### Analog Output:

- 4-20 mA, Loop Powered (two-wire)
- 16-Bit Resolution
- Accuracy: 0.05% of FS @ 25°C, 50 PPM/°C Temperature Drift
- Loop Drop: 8.0 VDC
- Calibration via Keypad
  - Zero and Full Scale Engineering Values
  - Hardware (DAC) Calibration
- Battery Backup
- Update Period: 1 second

### Volumetric Pulse Output:

- Optically Isolated Open – Collector Output
- Output Rating: 40 mA Max @ 30 VDC
- Software Configurable Pulse Width Duration and Pulse Representation
  - Pulse Width Duration: 65, 130, 195, 260, 520, 1040 milliseconds
  - Pulse Representation: 0.001, 0.01, 0.1, 1, 10, 100 volume units

### Amp & Square Output:

- Open-Drain Transistor Output of Turbine Meter Input Signal

- Output Rating: 50 mA @ 30 VDC (Analog Output and Amp & Square Outputs are mutually exclusive – choose one or the other.)

## Packaging

- Explosion Proof – CSA (NRTL/C) use in USA/Canada
- Class I, Div I, Groups B, C, D
- Class II, Div I, Groups E, F, G

## Power Supply Options

- Internal Lithium Battery – 2 year minimum life
- External Power Supply (8 to 30 VDC reverse polarity protection) Internal Battery Backup
- Loop Powered (4-20 reverse polarity protected) Internal Battery Backup

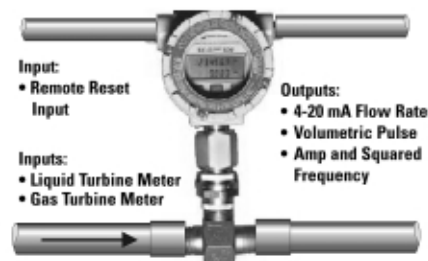
## Environmental

### Operating Temperature Range:

- -40°F to +167°F (-40°C to +75°C)

### Humidity:

- 0 - 90% non-condensing



WARRANTY-LIMITATION OF LIABILITY: Seller warrants only title to the product, supplies, and materials and that, except to software, the same are free from defects in workmanship and materials for a period of one (1) year from the date of delivery. Seller does not warranty that software is free from error or that software will run in an uninterrupted fashion. Seller provides all software "as is". THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Seller's liability and Buyer's exclusive remedy in any case of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any product, software, supplies, or materials is expressly limited to the replacement of such products, software, supplies, or materials on their return to Seller or, at Seller's option, to the allowance to the customer of credit for the cost of such items. In no event shall Seller be liable for special, incidental, indirect, punitive or consequential damages. Seller does not warranty in any way products, software, supplies, and materials not manufactured by Seller, and such will be sold only with the warranties that are given by the manufacturer thereof. Seller will pass only through to its purchaser of such items the warranty granted to it by the manufacturer.

## Cameron\_NuFlo测量系统\_流量及控制类仪表联系方式：

信德迈科技(北京)有限公司 CNMEC Technology Company

地址：北京朝阳区望京街10号望京SOHO-T1-C座2115室

邮编：100102

电话：010-8428 2935, 8428 9077, 8428 3983

手机：139 1096 2635

Http：//www.cnmec.biz

E-mail：sales@cnmec.biz

传真：010-8428 8762

Tulsa, OK