

NUFLO MC-II Flow Analyzer

Cameron's NUFLO™ MC-II™ Flow Analyzer provides separate, continuous digital displays of flow rate and accumulated flow based on input from a NUFLO or BARTON® liquid or gas turbine flow meter. The low current consumption of its liquid crystal displays and CMOS micro-processor based circuitry enable years of dependable performance from a single lithium battery. Typical battery life is three to five years.

Totalizer readings can be made in any desired volumetric units, and flow rates can be measured in units per second, minute, hour or day. Rate and total are quickly and easily calibrated using the keypad on the front of the MC-II. The instrument is suitable for outdoor installation and requires no additional protection from the weather. The unit may be mounted directly on the turbine meter or attached remotely.

Specifications

Standard unit without options:

- Size: 7.3" wide x 8.3" high x 3.4" deep
- Weight: 6 lb including shipping container
- Power supply: One 3.6 volt lithium battery
- Current consumption: 200 microamps typical
- Temperature range: -40° F to 140° F (-40° C to 60° C)
- Totalizer and flow rate display: Six digits
- Divisor or calibration factor range: 0.001 to 999,999
- Standard units: bbl and bpd (other units available)
- Accuracy: ± 1 count (totalizer)
- Input frequency: 0 to 3500 Hz
- Input amplitude: 30 to 3000 mV peak-to-peak

Optional Features (specify those desired):

- Totalizer and flow rate units other than bbl and bpd
 - Specify totalizer units and/or flow rate units
- Total reset: Password-secured access allows user to reset totalizer to zero from front panel
- Calibration enable: Password-secured access allows user to change calibration settings from front panel
- Remote mounting hardware:
 - Stainless steel, for installation on 2" nominal pipe, horizontal or vertical
 - 10' signal cable assembly is standard with the remote mount option. (Additional lengths are available – consult factory.)



Improved, simplified calibration

- Pulse output (available with non-ATEX model)
 - Powered by customer's source
 - For intrinsically safe (50 to 60 ms duration), specify:
 - Dry contact relay – 5 volt coil, 200 mA max, 6 VDC max
 - Open collector transistor – 200 mA max, 6 VDC
 - Optically isolated transistor – 100 mA, 6 VDC
 - For non-intrinsically safe (50 to 60 ms duration), specify:
 - Relay – 5 V coil, 0.5 mA max, 30 VDC max, 10W max (resistive)
 - Relay – 12 V coil, 0.5 mA max, 30 VDC max, 10W max (resistive)
 - Relay – 24 V coil, 0.5 mA max, 30 VDC max, 10W max (resistive)
 - Open collector transistor – 0.3 mA max, 30 VDC max
 - Optically isolated transistor – 0.1 mA max, 30 VDC max

Approvals

- CSA-certified in US and Canada, intrinsically safe in hazardous locations Class I, Division 1, Groups A, B, C, D; Type 4 enclosure
- ATEX-certified, II 1G Ex ia IIC T4 IP66
- Compliant with EMC Directive



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.