

FC220 Open Channel Flow Monitor

Measure and Totalize Flows in Open Channels



Description

The FC220 Open Channel Flow Monitor is a reliable and accurate instrument for measuring and totalizing open channel flows for flumes and weirs, as well as for any gravity-type open-channel flow application. The flow meter accepts any 4-20 mA water depth measurement input and the meter's powerful microprocessor instantly calculates and displays water flow and totalizer values in user selectable units using one of several calculation modes. The monitor has an 8-button keypad that easily guides you through the versatile setup menus.

Display

The Open Channel Flow Monitors display water flow with up to 7 digits allowing for very large flows to be displayed. The totalizer records up to 9 digits of flow volume in non-volatile memory, and is password protected from reset.

Output

The water flow monitors have four independent relay outputs for triggering external devices like water samplers and monitoring devices. The monitor's relays can be separately programmed to trigger based on volume per pulse, and threshold settings can be used to limit triggering to flows above preset levels. There is also an accurate and scalable 4-20mA output provided for monitoring the flow using data loggers and PLC devices. Both USB and serial internal data loggers are available as factory options for the monitors to allow the historical flow data to be recorded, as well as the exact time of each relay trigger event.

- Digital LCD screen
- Easy-to-use interface with user selectable flow tables
- Accepts any 4-20mA water level sensor's input
- Output signal for recorders or displays
- Sampler triggering output
- Water resistant enclosure

Specifications

Display/Keypad: 16 character x 2 line LCD backlit, 8-button tactile keypad

Capacity:

Flow: 7 digit maximum

Totalizer: 9 digit maximum

Level: 5 digit maximum

Display Resolution: 3 decimal places maximum, Auto-adjusting

Accuracy: Sensor accuracy + equation/table error + 0.1% + 1 digit Units:

Level: Feet, inches, meters, centimeters

Volume: Cubic feet, gallons, million gallons, cubic meters, liters

Time: Seconds, minutes, hours, days

Flow: 20 Combinations of volume and time units above

Level Sensor Input: 4-20mA 2-Wire or 3-wire, 0-5VDC, 0-1VDC

Output: One 4-20mA scalable, 4 independent SPDT relays (8A @ 250VAC, 5A @ 30VDC resistive)

Power: 12VDC or 18-24VDC Input, +/-10%

Current Draw: 150mA Maximum, <1mA Power Saving Mode

Internal Fuse: 315mA

Power Adapter: 18VDC Universal Power Supply, 90-220VAC Input

Enclosure: 7.1x5.1x1.4 inch (18x13x3.5 cm) (WxHxD)

Weight: 1 lb (0.45 kg)

*See website for pre-programmed tables

Options and Accessories

FC220-AC Open Channel Flow Monitor AC Power*

FC220-DC Open Channel Flow Monitor DC Power*

FC220-AC-D Open Channel Flow Monitor AC Power*
Includes USB datalogger and software.

FC220-DC-D Open Channel Flow Monitor DC Power*
Includes USB datalogger and software.

Battery option

Includes Heavy Duty Environmental Enclosure

* Open channel flow sensor not included, see website for sensor options. Please specify flume/weir type when placing order.

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