

# MULTIFUNCTION FLOW COMPUTERS

## FC-21



FC-21 shown smaller than actual size.

68 x 138 mm (2.67 x 5.43") cutout



## FC-22

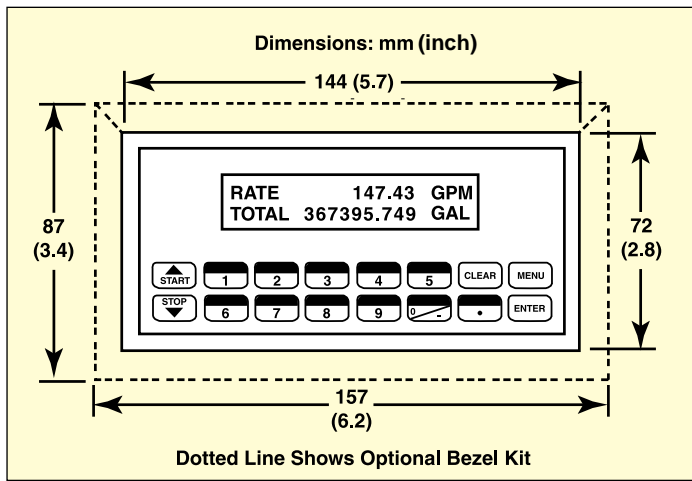


FC-22-V shown smaller than actual size.

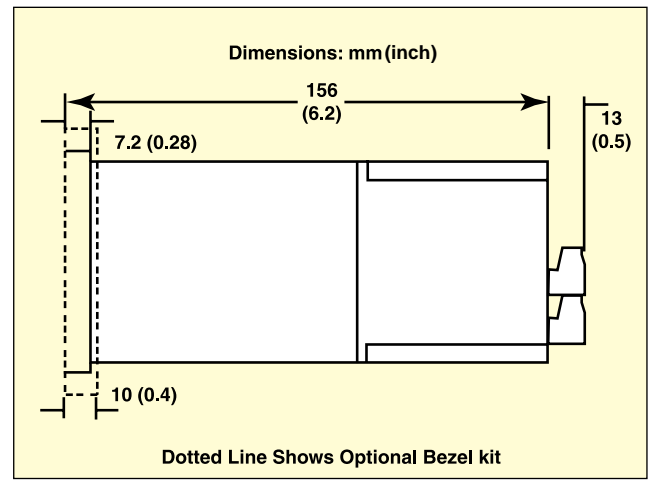
- ✓ Custody Transfer with Audit Trail
- ✓ Liquid, Gas, Steam, and Heat Flow Equations
- ✓ Menu-Selectable Inputs/Outputs
- ✓ Isolated Pulse and Analog Outputs
- ✓ RS232 Communications with Windows Setup Software

OMEGA's FC-21 and FC-22 flow computers are useful in a variety of flowmeter applications. The FC-21 is suitable for liquid batching, volumetric batching, and corrected-volume applications. The FC-22 is designed for liquid, gas, steam, and heat applications. Both models can store multiple flow equations.

These versatile instruments are programmable from the front panel. During setup, the user can assign inputs and outputs. For example, the isolated analog output can monitor the volume flow, corrected-volume flow, mass flow, temperature, pressure, or density. The RS232 serial port allows for data logging, transaction printing, or connection to a modem for remote meter reading.



FC-21/22 Front Dimensions



FC-21/22 Side Dimensions

## SPECIFICATIONS

### Environmental

**Operating Temperature:** 0 to 50°C (32 to 122°F)

**Storage Temperature:** -40 to 85°C (-40 to 185°F)

**Relative Humidity:** 0 to 95%, non-condensing

**Display Type:** Alphanumeric, 2 lines, 7.6 mm (0.3") characters, backlit LCD or VFD (specify at time of order)

**Mounting:** Panel, wall mount

### Power Supply:

**FC-21:** 110, 220 Vac standard; 12 or 24 Vdc optional

**FC-22:** 85 to 275 Vac standard; 24 Vdc optional

### Signal Inputs

#### Pulse:

##### High-Level Pulse:

Low = 0 to 1 Vdc; high = 3 to 30 Vdc

##### Low-Level Pulse:

10 mV or 100 mV (magnetic pickup)

**Frequency:** Up to 20 kHz

### Analog

**Voltage:** 0 to 10 Vdc, 0 to 5 Vdc, 1 to 5 Vdc (FC-21 only)

**Current:** 4 to 20 mA, 0 to 20 mA

### Temperature Input

**RTD:** 100 Ω DIN RTD

### Auxiliary/Compensation:

**FC-21:** Temperature, density

**FC-22:** 2 temperature, pressure, density

### Excitation Voltage:

**FC-21:** Programmable—5 Vdc, 12 Vdc or 24 Vdc @ 100 mA

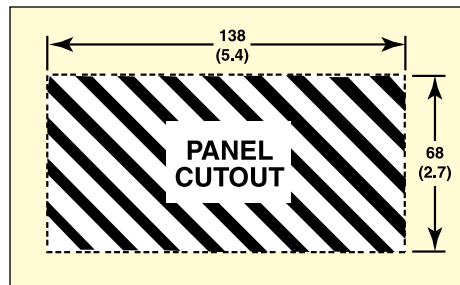
**FC-22:** Fixed @ 24 Vdc

**Relays:** Menu assignable for each relay; 2 SPDT relays rated 5 A, 240 Vac or 30 Vdc; Contact Flow Engineering for additional information

**Isolated Output:** Menu assignable

**Analog:** 4 to 20 mA; 1000 Ω maximum load

**Pulse:** Open collector; 24 Vdc (FC-22 only)



FC-21/22 Panel Cutout



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.

## To Order

Model No.	Description
FC-21	Multifunction flow computer for liquid applications
FC-22	Multifunction flow computer for liquid, gas, steam, and heat applications
FC-21-V	Multifunction flow computer with VFD display
FC-22-V	Multifunction flow computer with VFD display
FC-21-NEMA	Flow computer with NEMA 4 (IP65) wall mount
FC-22-NEMA	Flow computer with NEMA 4 (IP65) wall mount
FC-21-EXP	Flow computer factory mounted inside explosion-proof box (no button access)
FC-22-EXP	Flow computer factory mounted in explosion-proof box (no button access)

## Options

Suffix	Description
-220VAC	220 Vac power option (optional for model FC-21, 85 to 275 Vac power standard on model FC-22)
-12VDC	12 Vdc power option (available for FC-21 only)
-24VDC	24 Vdc power option
-RS485	RS485 serial connector

Comes complete with operator's manual.

**Ordering Examples:** FC-21, multifunction flow computer for liquid applications.

OCW-3, OMEGACARE<sup>SM</sup> extends standard 2-year warranty to a total of 5 years.

FC-22, multifunction flow computers for liquid, gas, steam and heat applications.