

# FC201/301

## Fuel Flow Computers

### Description

The Flow Technology FuelCom® Flow Computers are full-featured data display systems. They are available in two basic styles: The FC201 series Hand-Held flow computer, and the FC301 series Panel-Mount flow computer. They are part of Flow Technology's exclusive FuelCom® Diesel Fuel Metering System. This system provides ultra-high accuracy metering of net fuel burn on large diesel engines. The FC201/301 allow direct, easy access to flow and RPM data for up to 3 engines, metering both the supply and return flowmeters on each engine. The FC201/301 have several pre-programmed data display modes as well as allowing up to ten customized data displays programmable by the user. The built-in datalogging feature allows thousands of readings to be stored in the unit for printing or download.

### Standard Features

- Simultaneous multi-engine metering capabilities
- Datalogging capabilities
- Simple plug-and-play operation
- Backlit Supertwist LCD display
- User programmable
- Built-in memory battery backup
- Sealed membrane keypad
- Small rugged plastic case
- Convenient retractable hook (FC201 only)
- Panel Mountable (FC301 only)
- High speed RS-485 communications
- Configurable as Master or Slave for multiple displays of the same data.

### FC301



### FC201



### Application

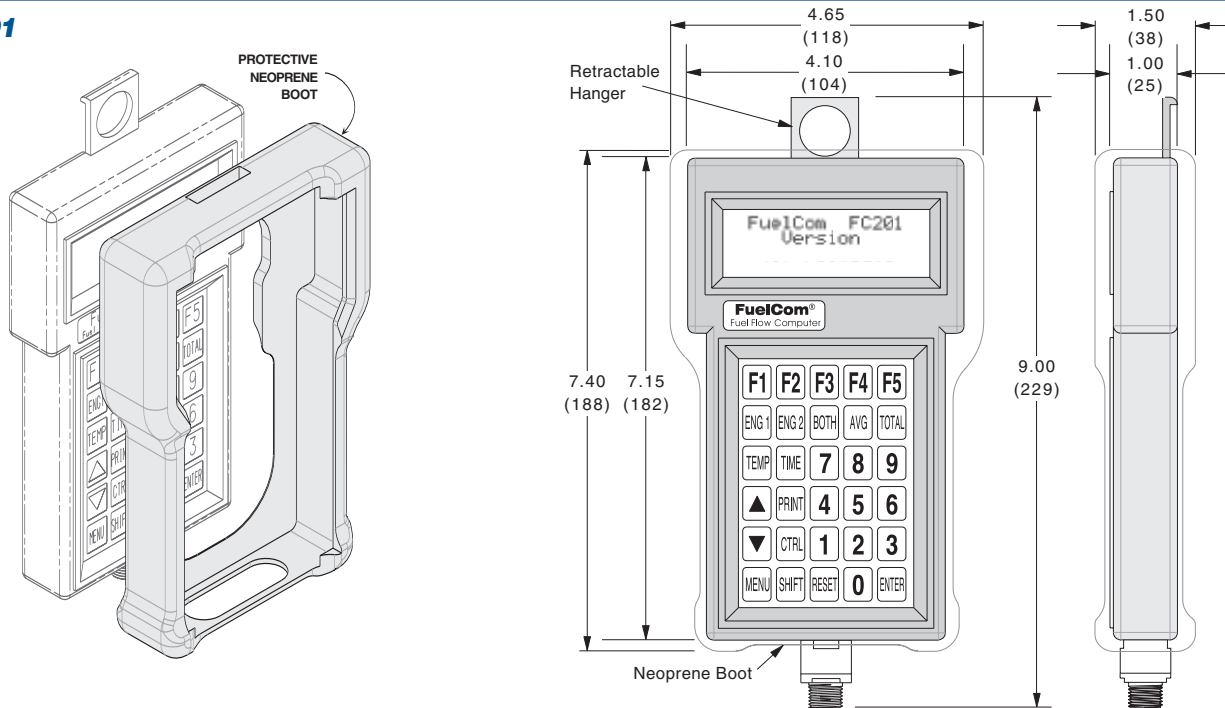
The Flow Technology FC201/301 Fuel Flow Computers are the primary user interface to the Flow Technology FuelCom® Diesel Fuel Metering System. The FC201 portable unit provides simple 'in the field' fuel consumption data as a part of a scheduled maintenance program or as a troubleshooting tool. The FC301 panel-mount unit allows for continuous in-place metering. Both units are designed to provide maximum accuracy and reliability.

### Principle of Operation

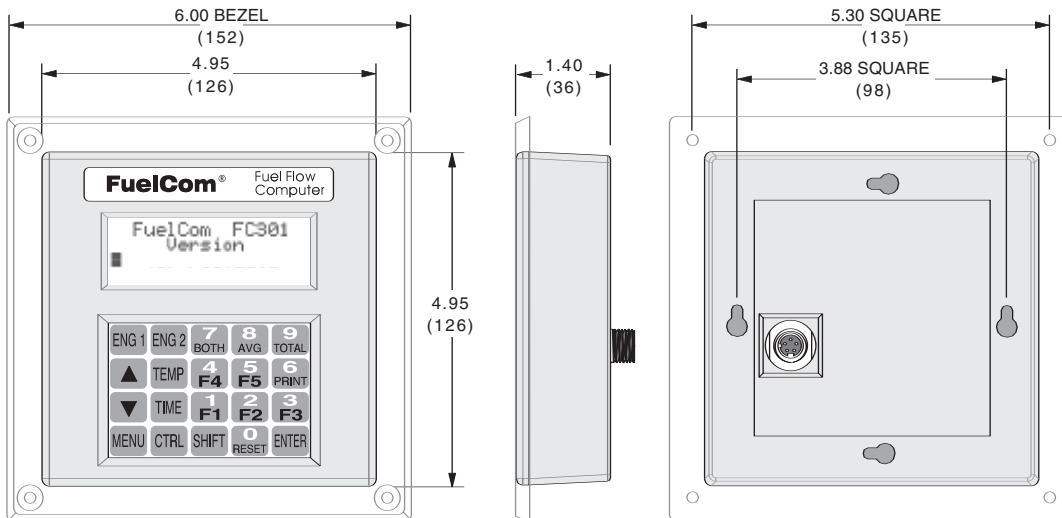
The Flow Technology FC201/301 are powerful micro-processor computers. They communicate digitally with the FuelCom FC800/FC900 series transmitters using the industry-standard RS-485 protocol. This protocol allows multiple devices to communicate on a common 2-wire network - providing simplified wiring and maintenance. Once programmed with the transmitter addresses, the FC201/301 interrogate each transmitter for real-time flow, temperature and RPM information. The FC201/301 then display the information in a variety of pre-programmed and user programmed displays. Datalogging allows any of the items to be stored for printing or for downloading to a computer for further analysis.

## Dimensions inches (mm)

### FC201



### FC301



## Other FuelCom® Products

FuelCom Precision Flowmeter and FC900 Transmitter: Reliable positive displacement flowmeters and micro-processor based compensated flow transmitters for ultra-high accuracy measurements.

JB-60 RS-485 Serial Communications Junction Box: Custom designed fully factory pre-wired junction box to connect multiple flowmeters to multiple flow computers and a power supply.

PS1/PS2 AC to DC and DC to DC Power Supplies: Designed to interface with almost any power standard, these power supplies accept a wide range of voltages and frequencies.

FCP Complete FuelCom Portable System: The ultimate in portable precision. A complete FuelCom system - including flowmeters, junction-box, flow computer, power supplies (AC & DC) and cables - for one engine, all in a rugged, water-tight traveling case.

# Specifications

## Case

FC201	Cycolac® ABS with retractable hanger
FC301	Valox® 420 plastic, panel mountable

## Display

Backlit Supertwist LCD, 3/16" high characters. 4 rows by 20 characters per row, 5 by 7 pixel character resolution.

## Keypad

Sealed membrane keypad including 5 user programmable 'F' keys

FC201	30 keys
FC301	20 keys (multifunction)

## Memory

128K Flash EEPROM  
256K Static RAM, data-logger battery backed

## Interface

5 pin Micro-C Connector

## Communications

RS-485 @ 19200 baud

## Power

9-28 VDC

## Environment

Operating Temp	32° F to 122° F (0° C to 50° C)
Storage Temp	-4° F to 158° F (-20° C to 70° C)
	Max 90% non-condensing humidity

## Rating

NEMA 4 / 12 when properly mounted (FC301 only)

## Weight

FC201	8 ounces (227 grams)
FC301	13 ounces (370 grams)

## Approvals

FC201	UL • CE • FCC Class A • CISPR Class A • CENELEC EN 55022
FC301	UL • CE • FCC Class A • CISPR Class B • CENELEC EN 55022 and EN 50082-1

## Software

Custom communication and user interface software. Menu driven pre-programmed and user programmed functions. Includes the following display data (partial list)

ENG1 SUPPLY	ENG2 SUPPLY
ENG1 RETURN	ENG2 RETURN
ENG1 SUPPLY TEMP	ENG2 SUPPLY TEMP
ENG1 RETURN TEMP	ENG2 RETURN TEMP
ENG1 RPM	ENG2 RPM
ENG1 NET	ENG2 NET
ENG1 AVG	ENG2 AVG
ENG1 TOTAL	ENG2 TOTAL
ENG1 TIME	ENG2 TIME
ENG1 + ENG2 TOTAL	
STOPWATCH	
LOGGING ON/OFF/SPAN/INTERVAL/PRINT	
MASTER/SLAVE	

## Model Numbering System

**F** **C** **2** **0** **1** - **0** **1** - **1**  -

**Base Model No.** \_\_\_\_\_

**Power** \_\_\_\_\_  
01 = 9-28 VDC Supply

**Software Type** \_\_\_\_\_  
1 = FTI Standard

**Number of Engines** \_\_\_\_\_  
2 = 2 engines\*  
6 = 6 engines

**Options** \_\_\_\_\_  
00 = No RPM functions  
01\* = RPM functions\*\*

\*Standard Configuration

\*\*This option must be selected when using the FC801 RPM Sensor

**F** **C** **3** **0** **1** - **0** **1** - **1**  -

**Base Model No.** \_\_\_\_\_

**Power** \_\_\_\_\_  
01 = 9-28 VDC Supply

**Software Type** \_\_\_\_\_  
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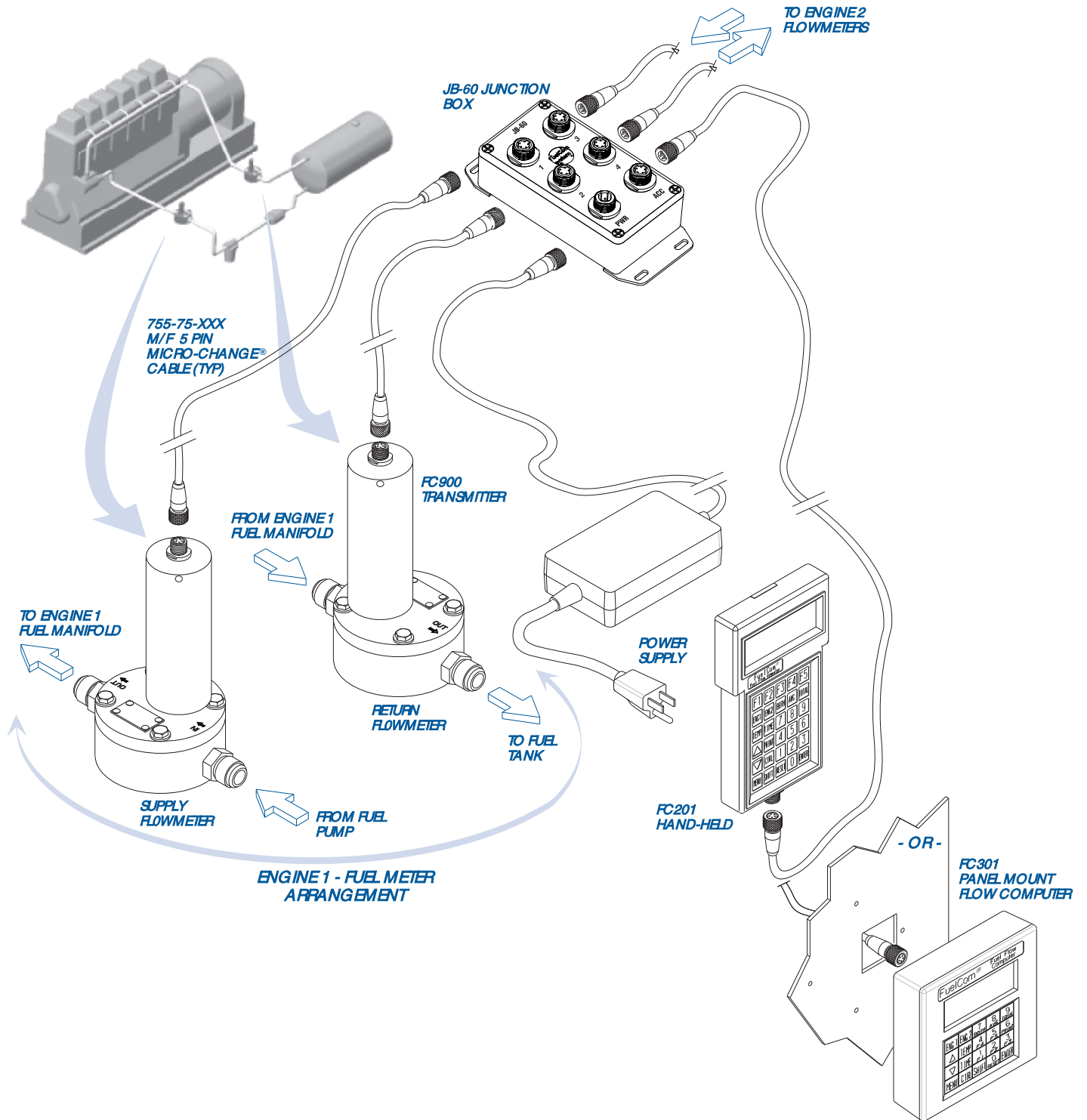
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# FuelCom® Diesel Fuel Metering System



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