Seametrics
Flow Meters & Controls

FT400-SERIES
Rate/Total Indicator

Protective Cover Closed

Product NEW Release

FEATURES
- **Simple Setup**
- **DC Powered (FT430), Loop Powered (FT440) or Battery Powered (FT450)**
- **Remote or Flow Sensor Mounted Indicator**
- **Rugged Plastic Housing**
- **Non-volatile Memory**

THE RIGHT INDICATOR FOR
- **Water Treatment**
- **Water Utility**
- **Industrial Chemical Handling**

ISO 9001:2008 CERTIFIED COMPANY

PROUDLY MADE IN THE USA

GENERAL INFORMATION

The FT400 series flow computers are microcontroller-based indicator/transmitters that interface with pulse output flow sensors to compute and display flow rate, flow total, and also generate output signals representing flow. The FT430 and FT450 have one scaled pulse output while the FT440 has two. In addition to a scaled pulse output, all three models provide an alternative pulse pass-through output. Galvanic isolation is provided for most pulse outputs (see table.)

The FT450 is battery powered while the FT430 may be powered by an external DC power source or an optional internal AC power supply*. The FT440 is a "two-wire" or "loop powered" device, meaning that it is powered by the 4-20 mA loop circuit itself. An optional internal AC power supply* is available for the FT440 with dual 24 and 12VDC outputs to power both the loop and sensors requiring more power than the loop can supply.

*Internal power supply is available for the wall mount option only.

Available pulse and 4-20mA analog outputs can be used to signal external devices, e.g. certain metering pumps and water treatment controls. Alternatively, one or more pulse outputs can be configured as alarm outputs. FT400 Series flow computers can be password protected to prevent resetting the total or changing configuration settings.

All FT400 meters are available in wall or panel mount configurations. The FT430/440 models can be factory mounted on the meter. Some configurations of the FT400 series can be converted from wall to meter or meter to wall after installation if needed. Consult factory for details.

Order the FT440 only if a 4-20mA output signal is a requirement and the FT450 if internal battery power is needed. Otherwise the FT430 offers the most flexibility.

SPECIFICATIONS*

		FT430	FT440	FT450
Power		7-30Vdc, 4mA	7-30Vdc, 4mA (4-20 mA when loop-powered)	Lithium "C", 3.6Vdc, replaceable. Life is ~5 years depending on usage.
Display	**Rate**	5-digit autorange	5-digit autorange	5-digit autorange
	Total	8-digit	8-digit	8-digit
Units	**Rate Units**	Gallons/Second/Minute/Hour/Day, Liter/Second/Minute/Hour/Day, Cubic Feet/Second/Minute/Hour/Day, Cubic Meters/Second/Minute/Hour/Day, Miner's Inch, Mega Liters/Day, Million Gallons/Day, Fluid Oz/Second/Minute/Hour/Day		
	Total Units	Gallon, Gallon x 1000, Liters, Mega Liter, Cubic Meter, Acre Feet, Cubic Feet, Cubic Feet x 1000, Million Gallon, Miner's Inch Day, Acre Inch, Fluid Ounce		
Outputs	**Pulse Output 1**	Scaled pulse output, high alarm output or low alarm output. Optoisolated on FT430 and FT440.**		
	Pulse Output 2	Pulse pass through	Scaled pulse output, high alarm output or low alarm output	Pulse pass through
	Loop Power Output	N/A	4-20mA Loop	N/A
Set P Range		0.1 - 99999.9 units/pulse	0.1 - 99999.9 units/pulse	0.1 - 99999.9 units/pulse
Input		5V pulse or contact closure	5V pulse or contact closure	Micropower GMR Sensor (square wave)
Input Range		2000 Hz Max	2000 Hz Max	550 Hz
K-Factor Range		.001 - 999999.999	.001 - 999999.999	.001 - 999999.999
Flow Alarm Output Range		0.1 - 99999.9	0.1 - 99999.9	0.1 - 99999.9
Operating Temperature		0˚ to 55˚ C (-32˚ to 131˚ F)	0˚ to 55˚ C (-32˚ to 131˚ F)	0˚ to 55˚ C (-32˚ to 131˚ F)
Non-Operating Temperature		-40˚ to 75˚ C (-40˚ to 158˚ F)	-40˚ to 75˚ C (-40˚ to 158˚ F)	-40˚ to 75˚ C (-40˚ to 158˚ F)
Environmental		NEMA 4X, IP67	NEMA 4X, IP67	NEMA 4X, IP67
Regulatory		C€ Mark	C€ Mark	C€ Mark Pending

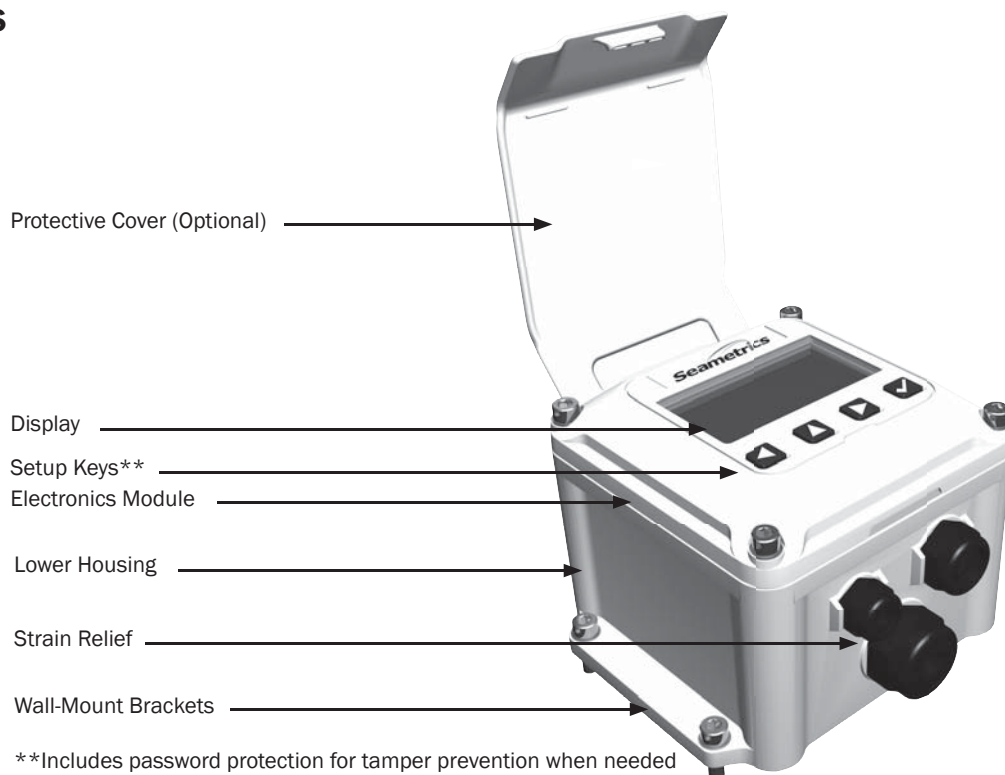*Specifications subject to change • Please consult our website for current data (www.seametrics.com).
**Scaled output pulses have a fixed width of 100ms. Maximum pulses per second is 6.5Hz

FT400 SERIES PULSE OUTPUT FUNCTION TABLE

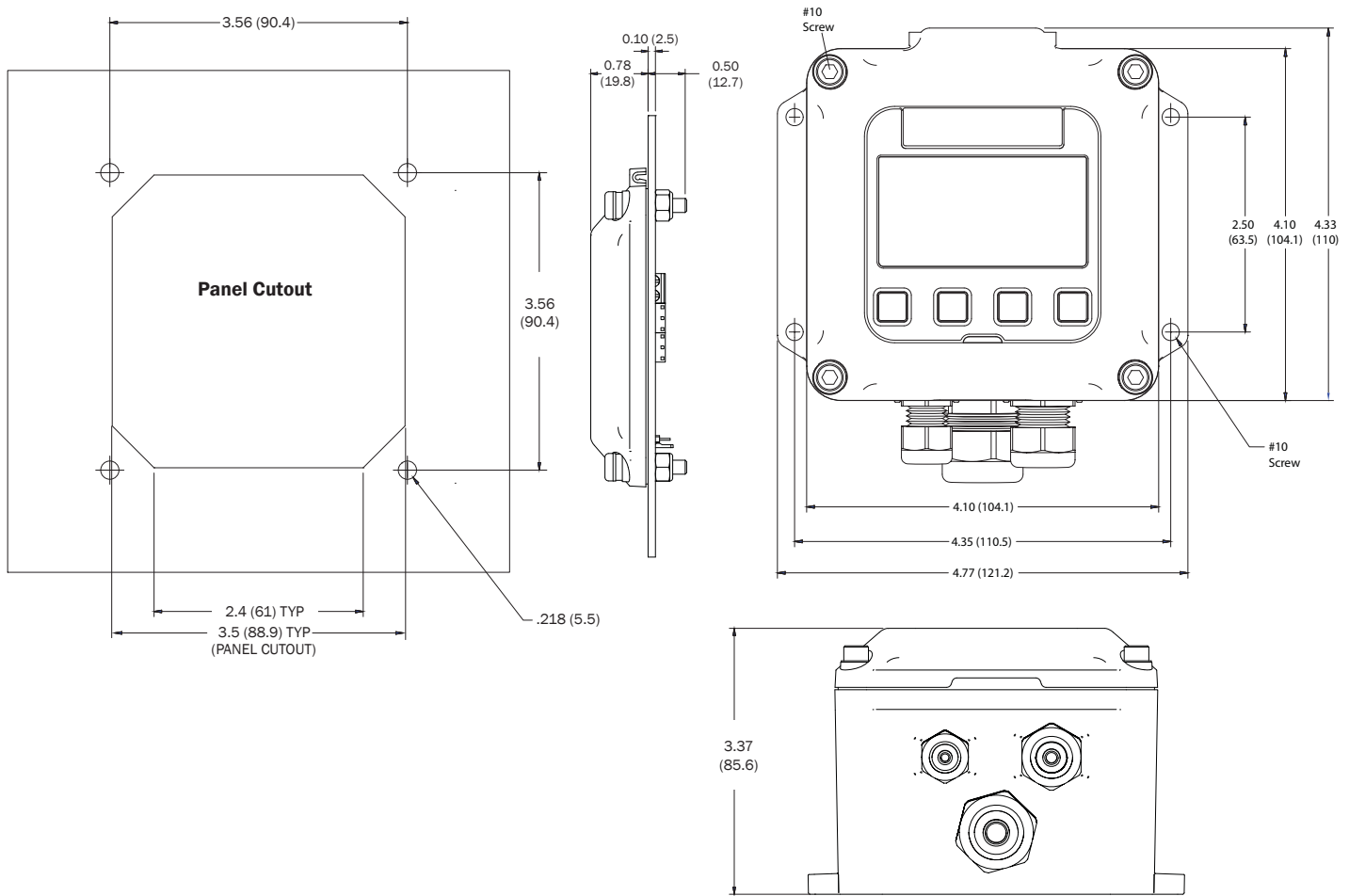| PULSE OUTPUT 1 (SCALED)	FT430	FT440	FT450
TYPE	Current sinking	Current sinking	Current sinking
MAX. VOLTAGE	45 Vdc	45 Vdc	3.6 V
MAX. CURRENT	100 mA	100 mA	100 mA
MAX. FREQUENCY	6.5 Hz	6.5 Hz	6.5 Hz
PULSE WIDTH	100 ms	100 ms	100 ms
ISOLATION	300 V	300 V	NOTE 1
CONFIGURABLE AS ALARM	YES (High or Low)	YES (High or Low)	YES (High or Low)
PULSE OUTPUT 2 (SCALED)	**FT430**	**FT440 (Note 2)**	**FT450**
TYPE		Current sinking	
MAX. VOLTAGE		45 Vdc	
MAX. CURRENT		10 mA	
MAX. FREQUENCY	Not Available	6.1 Hz	Not Available
PULSE WIDTH		100 ms	
ISOLATION		300 V	
CONFIGURABLE AS ALARM		YES (High or Low)	
PULSE OUTPUT 2 (PASS-THROUGH)	**FT430**	**FT440**	**FT450**
TYPE	Current sinking		Current sinking
MAX. VOLTAGE	45 Vdc		3.6 V
MAX. CURRENT	100 mA		100 mA
MAX. FREQUENCY	2000 Hz NOTE 2	Not Available	550 Hz
PULSE WIDTH	SAME AS SENSOR INPUT		SAME AS SENSOR INPUT
ISOLATION	300 V		NOTE 1
CONFIGURABLE AS ALARM	NO		NO

NOTE 1: 150 V effective isolation when using Seametrics micropower sensors. • NOTE 2: With 2000 ohm or lower pull-up resistance.

FEATURES

Protective Cover (Optional)

Display

Setup Keys**

Electronics Module

Lower Housing

Strain Relief

Wall-Mount Brackets

**Includes password protection for tamper prevention when needed

DIMENSIONS Dimensions are in Inches (Millimeters)

HOW TO ORDER

MODEL

DC-powered indicator = **FT430**

Loop-powered indicator/transmitter = **FT440**

Battery-powered indicator = **FT450**

MOUNTING

Wall mount = -**W**

Panel mount = -**P**

Meter mount = **See appropriate meter specification to order meter mounted units.**

OPTIONS

Tamper-evident = **-32**

Non-resettable total = **-64**

Display Cover = **-126**

Built-in 120/240 Vac/12/24 Vdc dual power supply (FT430W & FT440W only, use with magmeters) = **-139**

Built-in 120/240 Vac/12 Vdc single power supply (FT430W only, use with magmeters) = **-140**

ACCESSORIES

Display Cover = **102021**
Dual power supply, plug-in, 115 Vac, 12/24 Vdc = **PC42**
LMI pump power cable = **100013**
LMI pulse out cable = **100039**
Power converter, plug-in, 115 Vac, 24 Vdc = **PC3**

FT430 Module = **103591-01**
FT440 Module = **103591-02**
FT450 Module = **103591-03**
Wall to meter mount adapter kit, standard = **103391**
Wall to meter mount adapter kit, tamper evident = **103392**
Meter to wall mount conversion kit = **103396**