The FIV Series are flow rate/totalizer/batch controllers ideal for almost any flow application involving an analog signal. The FIP Series are flow rate/totalizer/batch controllers ideal for almost any flow application involving a pulse signal. They display both flow rate and total on an easy to read 7 segment LED display that provides up to 4-1/2 digits of rate display and 6 digits of total display. The analog input meters accept all the standard process signals. The pulse input meters accept pulse, open collector, TTL or square wave inputs. The meters also provide a loop power supply to drive the sensor.

For applications requiring more than just a display of rate or total, these meters can be equipped with two relays and a 4-20 mA retransmission output. The relays can be used for alarming based on the flow rate or for simple batch controlling based on the flow total. The relays can also be used for applications beyond flow. For instance, they can be programmed for alternation making these products ideal for pump-control applications.

**FEATURES**
- **FIV**: 4-20 mA, 1-5 V, 0-5 V, or 0-10 V field selectable inputs
- **FIP**: Pulse, open collector, NPN, PNP, TTL, switch, or square wave inputs
- Full 6 digit display for total, 4-1/2 digit + extra zero for process/rate
- Display in engineering units; rate per second, minute, hour, or day
- Scale without a calibrator
- 11-point calibration for non-linear inputs
- **FIV**: Automatic square root and programmable exponent for weirs and flumes
- **FIP**: K-factor, internal, or external calibration
- Low-flow cutoff
- **FIV**: Analog input
- **FIP**: Pulse input
- 24 VDC isolated power supply standard
- Quick preset change feature for batch control
- **FIV**: Pump alternation control feature
- **FIP**: Quick preset change feature for batch control
- 2 relays and 4-20 mA output options

**SPECIFICATIONS**
- **Inputs**: FIV: (Field Selectable) Analog: 4-20 mA, 0-20 mA, 0-5 V, 1-5 V, 0-10 V, 1-10 V. FIP: (Field Selectable) Pulse: Pulse or Square Wave 0-5 V or 0-12 V @ 30 kHz max.; TTL; Open Collector 4.7 KΩ pull-up to 12 V @ 30 kHz; Switch Contact 4.7 KΩ pull-up to 12 V @ 40 Hz.
- **Display**: 6 digit, 7 segment display 0.56˝ (14.2 mm) high;
  - Rate: -19,999(0) to 29,999(0) with selectable extra zero;
  - Total: 0 to 999,999; automatic lead zero blanking.
- **Accuracy**: ±0.1% F.S., ±0.004 mA.
- **Supply Voltage**: 115 or 230 VAC ±10%, 50/60 Hz.
- **Power Consumption**: 12 VA.
- **Enclosure**: 1/8 DIN, high impact plastic.
- **Operating Temperature**: 32 to 140ºF (0 to 60ºC).
- **Alarm Points**: 0 or 2.
- **Alarm Output Relay Ratings**: 2 SPDT (form C), rated 2A @ 30 VDC or 2A @ 250 VAC resistive, 1/14 hp @ 125/250 VAC for inductive.
- **Alarm Point Deadband**: 0 to 100% of full scale, user selectable.
- **Isolation**: FIV: 500 VDC or peak AC, input-to-output or input/output-to-power line. FIP: 1500 VAC.
- **Loop Power Supply**: Isolated 24 VDC ±5% @ 20 mA, regulated. Maximum loop resistance is 1200Ω.
- **Weight**: 16 oz (454 g).
- **Front Panel Rating**: NEMA 4X, Panel gasket provided.

<table>
<thead>
<tr>
<th>Model</th>
<th>Input</th>
<th>Output 1</th>
<th>Output 2</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIV-1100</td>
<td>Analog</td>
<td>None</td>
<td>None</td>
<td>115 VAC</td>
</tr>
<tr>
<td>FIV-1110</td>
<td>Analog</td>
<td>2 Relays</td>
<td>None</td>
<td>115 VAC</td>
</tr>
<tr>
<td>FIV-1111</td>
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<td>2 Relays</td>
<td>(1) 4-20 mA</td>
<td>115 VAC</td>
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<tr>
<td>FIV-1200</td>
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</tr>
<tr>
<td>FIV-1210</td>
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<td>None</td>
<td>230 VAC</td>
</tr>
<tr>
<td>FIV-1211</td>
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<td>(1) 4-20 mA</td>
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<tr>
<td>FIP-2100</td>
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<td>FIP-2110</td>
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<td>Pulse</td>
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<td>None</td>
<td>230 VAC</td>
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<tr>
<td>FIP-2211</td>
<td>Pulse</td>
<td>2 Relays</td>
<td>(1) 4-20 mA</td>
<td>230 VAC</td>
</tr>
</tbody>
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