The RE100 Electronic Register is a battery powered device that accepts pulse inputs from a McCrometer Propeller flowmeter and simultaneously indicates both rate and total on a liquid-crystal display (LCD). The RE100 has separate scaling factors for rate and total, and also offers optional scaled pulse and industry-standard 4-20mA outputs. The RE100 is mounted in the standard McCrometer canopy housing.

Available part numbers:

<table>
<thead>
<tr>
<th>Model #</th>
<th>Installation</th>
<th>4-20mA Output</th>
<th>Pulse Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE100-000</td>
<td>Meter Mount</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>RE100-001</td>
<td>Meter Mount</td>
<td>No</td>
<td>Open Collector Transistor</td>
</tr>
<tr>
<td>RE100-012</td>
<td>Meter Mount</td>
<td>Yes</td>
<td>Opto-isolated Transistor</td>
</tr>
<tr>
<td>RE100-100</td>
<td>Remote Mount</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>RE100-101</td>
<td>Remote Mount</td>
<td>No</td>
<td>Open Collector Transistor</td>
</tr>
<tr>
<td>RE100-112</td>
<td>Remote Mount</td>
<td>Yes</td>
<td>Opto-isolated Transistor</td>
</tr>
</tbody>
</table>

NOTE: Add “-K” to the part number when ordering as a retrofit kit to an existing propeller meter. Specify the serial number of existing meter when ordering the retrofit kit.

Specifications:

Environmental:
- Operating Temperature: 32°F to 158°F (0°C to 70°C)
- Storage Temperature: -40°F to 158°F (-40°C to 70°C)
- Housing Rating: NEMA 4
- Electrostatic Discharge: 8 KV (IEC 1000-4-2 Level 3)
- Electrical Fast Transient: 1 KV (IEC 1000-4-4 Level 3)
- RF Susceptibility: 150 KHz to 230 MHz @ 10 V (IEC 1000-4-6 Level 3)

Input Signal:
- Type: Voltage pulse
- Voltage Range: 1-10 V (with hysteresis)
- Maximum Frequency: 3 kHz
- Minimum Frequency: 0.125 Hz
- Minimum Pulse Width: 2 µs

Optional Scaled Pulse Output:
- Type: Open Collector MOS Trans.
- Maximum Rating: 0.1 A, 32 V
- Pulse Width: 32 milliseconds

Optional 4-20mA Output Module:
- Type: Std 2-wire loop powered
- Resolution: 16 bits
- Operating Voltage: 12 to 32 VDC
- Scaled Pulse Output: Optically isolated MOS Trans.
- Power switch: Automatic battery override

Power Requirements:
- Battery Type: 3 VDC Lithium, Replaceable
- Operating Life: 4 years*
- Low Battery Indication: 6 months before expiration

Display Functions:
- Update Time: 0.5 to 5 seconds
- Display Timeout: 1 to 9999 seconds
- Non-volatile Storage: EEPROM updated every 60 minutes (when running)

Totalizer Functions:
- Display: 8 digits, 0.25” high
- Decimal Point: 0 to 4 places, programmable
- Total Scaling Factor: 0.0001 to 9999
- Reset: Front Panel, can be disabled permanently

Rate Functions:
- Display: 5 digits, 0.35” high
- Decimal Point: 0 to 4 places, programmable
- Rate Scaling Factor: 0.0001 to 9999
- Calculation Method: 1/Tau
- Accuracy: ±0.25% of reading
- Smoothing: 0 to 99%, programmable
- Rate Zero Time: 8 seconds

* - When used with the display timeout feature

Cable Color Codes:
Input Cable (Remote Mounted Only):
- Red: Sensor (+)
- Black: Sensor (-)

Output Cable (Pulse and/or 4-20 Output Only):
- Red: 4-20mA (+)
- Black: 4-20mA (-)
- White: Pulse (+)
- Green: Pulse (-)

Specifications are subject to change without notice