These units are available in two models: the PTX800A for analogue current/voltage rate signals; and the PTX800D with digital pulse outputs.

- Display total or rate in any engineering unit
- Bright 8 digit LED display
- Up to 2 alarm channels
- Optional analogue output
- Pulse output
- Reset pulse input
- Last count retention in case of power failure
- AC or DC powered
- Fully isolated
- LED alarm status indication
- 1/8 DIN standard facia with IP65 rating
- Integral power supply for active input devices

You can set the display for total or rate indication, then simply hold down the ‘rate/total’ button to check the other value.
Panel mount, Totaliser/Counters

Technical Data

Display
Type
Full 8 digit, red 7.2 mm LED
Display brightness
Programmable (in 14 steps)
Scaling
To display in % or engineering units
Rate display
Rates are displayed as up to five digit numbers (from 0-50,000)
Rate timebase
Rates can be displayed per second, minute or hour (also per day for the PTX800A only)
Total display
Totals are displayed as up to eight digit numbers (from 0-99,999,999)
Decimal points
The decimal points can be selected separately for rate and total displays (up to three decimal places)
Status indicators
Alarm channel 1, Alarm channel 2 and key status
Power supply
Type
AC or DC powered
AC (selectable) 110V/240V (47-63Hz)
DC 24Vdc
Permissible range
±10% (DC supply)
Power usage
AC 6VA or 6W at 24Vdc
Reset pulse input
Type
Contact closure
Effect
Resets total and clears any total alarms
Pulse output
Type
NPN O/C transistor type (isolated)
Scaling
One pulse per integer change in total
Pulse width
32 milliseconds
32 milliseconds minimum
15 pulses per second
Alarm outputs (optional)
Type
SPDT relay contacts
Rating
3A at 240Vac (resistive)
3A 240Vac/110Vac (resistive)
Isolation
1.5kV between channels

Analogue output (optional)
Type
Analogue current/voltage ( jumper selectable)
Range
Determined by calibration (in the range 0-22 mA or 0-11 V)
Output resolution
1.6μA or 0.8mV per bit
Voltage drive
Up to 900Ω load (at 20mA)
Pulse output
True voltage source (up to 20mA)
Current drive
Less than 20mA P/P
Off time
0.1% per 10,000 hours

General
Accuracy
Better than 0.05%
Linearity
Better than 0.05%
Repeatability
Better than 0.02% of span
Temperature drift
Less than 0.02% span/°C
Long term drift
0.1μV/°C/year

Insulation Co-ordination
Ports
Input / Output / Relay One, Relay Two / Power Supply
Rated Insulation Voltage
300Veff
Overvoltage Category
III
Impulse Withstand
4kV (1.2 / 50)
Isolation
2 kV (between ports)
Environmental Conditions
Operating temperature
0 to 60 °C
Storage temperature
-25 to +70 °C
Pollution Degree
2
Relative humidity
10% to 90% (non-condensing)
Housing
Type
Double Insulated, Panel mount
IP65 (from front of panel)
Approvals
Mark
DC Powered units only
E256486
LV Directive
EMC

Connections

<p>|</p>
<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Neutral / -</td>
</tr>
<tr>
<td>2</td>
<td>Live / +</td>
</tr>
<tr>
<td>3</td>
<td>Signal +</td>
</tr>
<tr>
<td>4</td>
<td>Signal –</td>
</tr>
<tr>
<td>5</td>
<td>DV</td>
</tr>
<tr>
<td>6</td>
<td>Pulse</td>
</tr>
<tr>
<td>7</td>
<td>Inputs (see individual units)</td>
</tr>
<tr>
<td>8</td>
<td>13 Normally Closed</td>
</tr>
<tr>
<td>9</td>
<td>14 Common (optional)</td>
</tr>
<tr>
<td>10</td>
<td>15 Normally Open</td>
</tr>
<tr>
<td>11</td>
<td>16 Normally Closed</td>
</tr>
<tr>
<td>12</td>
<td>17 Common (optional)</td>
</tr>
<tr>
<td>13</td>
<td>18 Normally Open</td>
</tr>
</tbody>
</table>

Notes:
- Note: loop compliance is 18V
- Note: kopp compliance is 18V
### Technical Data

**Inputs**

- **Type**: Digital pulse, including: NAMUR sensors; 3-wire PNP/NPN sensors; PNP/NPN open collector outputs; TTL logic; Solid State Switches; Low and high voltage pulses; and Volt-free contacts.
- **Input range**: 0 to 10kHz –24.00 to +24.00 mA or -11.00 to +11.00 V
- **Sensor power output**: Nominally 12 Vdc (to 25 mA)
- **Input voltage range**: Programmable from 50 mV to 250 V peak
- **Resolution**: Programmable (up to 10,000 pulses per unit change in total)
- **Input Impedance**: 22Ω (current)/1MΩ (voltage)
- **Rate to Total scaling**: Programmable (up to 10,000 pulses per unit change in total)
- **Analogue output (optional)**
  - **Type**: Proportional to rate or total
- **Reset input**
  - **Timing**: Close for 100mS minimum
  - **Pulse output**: Close for 250mS minimum
- **Max pulse rate**: 16 pulses per second
- **Options**
  - **/AO**: With analogue output fitted (specify format), e.g., PTX800D/.../AO/4-20mA
  - **/RO**: With dual alarms
  - **/FPS**: Custom input sensor supply voltage. State voltage, e.g., PTX800D/.../FPS/24Vdc

**Input Connections**

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Reset count</td>
<td>Short to 12 to reset</td>
</tr>
<tr>
<td>8</td>
<td>Security</td>
<td>Short to 12 to reset</td>
</tr>
<tr>
<td>9</td>
<td>Pull Up/Down</td>
<td>Inputs</td>
</tr>
<tr>
<td>10</td>
<td>Input – / 0 V</td>
<td>Inputs</td>
</tr>
<tr>
<td>11</td>
<td>Input +</td>
<td>Inputs</td>
</tr>
<tr>
<td>12</td>
<td>+12Vdc (out)</td>
<td>Inputs</td>
</tr>
</tbody>
</table>

**Ordering Information**

<table>
<thead>
<tr>
<th>Type (Model 1/2 - See key below)</th>
<th>Cat. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTX800D 24Vdc</td>
<td>794021133</td>
</tr>
<tr>
<td>PTX800D 24Vdc/ROAD</td>
<td>794021223</td>
</tr>
</tbody>
</table>

Note: For other ranges please specify PTX800D 1/2 where: 1 = Power Supply Voltage, 2 = Options