# **Process Meter**



# **Advanced Panel Meter**



Featuring an acclaimed easy-to-read display and a versatile set of inputs, the Process Meter takes the APM into a wide range of new industrial applications.

The programmable scale and custom annunciators mean users can tailor the meter to display their critical parameters exactly how they want, while the dynamic backlighting, in conjunction with setpoints, means operators are visually alerted when a parameter is out of range. The two outputs can be used to control other systems in the process, meaning the APM Process Meter is much more than just a display.

Trumeter's innovative technology brings a greater level of accuracy to the APM range through input signal optimization. By using this technology, accuracy of 0.1% or better is now achieved, allowing for more precise measurement, display and control. Non-linear sensors, such as thermocouples and pressure transducers, can also be used thanks to the new APM Configurator application that allows the user to configure upto 20 points in a non-linear conversion table.

#### Programmable dynamic 0-10V / 4-20mA / 10 -50mA Warning backlight colour flash User selectable Voltage & Current Combined digital and bar graph display seament curved bar graph display Programmable Programmable 4 digit star-burst display **Custom messages** X10 & annunciators WIDE viewing angle USB 2.0 alarm set points **USB** port for custom user settings PLC OUTPUT Less than 53mm user configurable deep non-linearization 2 physical digital and analogue outputs Full 4 digit readout for accuracy INPUT

### **Hoyt Electrical Instrument Works, Inc.**

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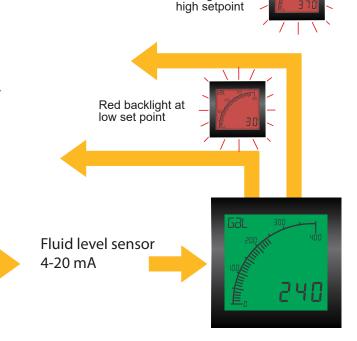
Red flashing backlight at

## Fluid Level Application

The APM Process Meter is used to display the volume of fluid in the tank. The 4-20mA analog output from the fluid level sensor is scaled to gallons, and the custom annunciator set to "Gal", all via the easy-touse software application.

High and low setpoints are configured so that the normal green display will flash red when the tank is too full or empty, there by alerting the operator. Additionally the APM digital outputs are integrated into the tank pumping system and the tank is automatically drained or filled if the setpoints are exceeded.

Tank



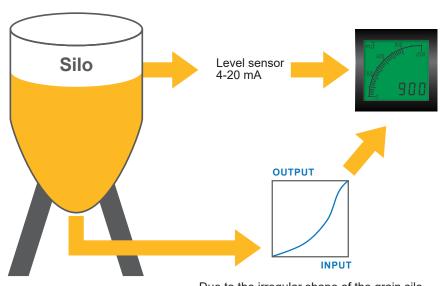
## **Silo Volume Application**

The APM Process Meter is used to display the volume of material in the silo, using the analog output from a level sensor.

The signal from the sensor is scaled into the measurement units cubic metres, and the annunciator customised to m3, all via the easy-to-use software.

Due to the irregular shape of the silo, the 20-point non linear table is used to correct the non-linear signal from the sensor.

The displayed value accurately shows the volume in the silo. High or low setpoints can be set, and the APM can be integrated into other systems for process control.



Due to the irregular shape of the grain silo

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# **Advanced Panel Meter**

## **Key Features**

#### Large multi-format display that incorporates:

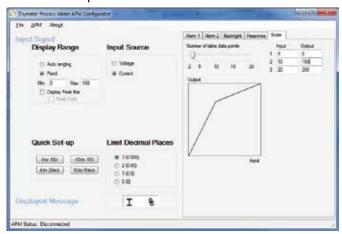
- 60 segment bar graph display Large 4 digit display
- Separate Starburst display area for annunciators, custom messages and alarm information
- Full color RGB dynamic backlight for user alerts

#### Programmable:

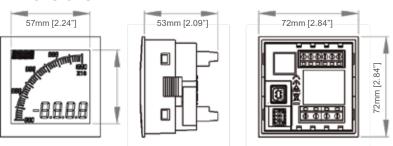
- Scaling and Range (min and max)
- Custom annunciators
- User selectable backlight color and intensity
- Two independent alarm set-points
- Two independent outputs
- · 4-20mA analog monitor output.

## **Easy To Use Software**

Just plug into any USB port on your PC, run the freely available APM Configurator application and you're off. No drivers required.



#### **Dimensions:**



Panel cutout: 68mm x 68mm [2.68" x 2.68"] as per DIN43700/IEC61554

#### Visibility:

- The largest display of any APM
- · User adjustable RGB backlight provides an almost infinite range of colors for different requirements or environmental conditions.
- · Wide viewing angle (both horizontal and vertical)
- Custom annunciators.

### **Specifications**

Input	Voltage	Current
Range (DC)	0 to +/-10VDC	0 - 50mA
Impedance	100ΚΩ	15Ω
Accuracy	0.1%	0.01%

#### **Environmental**

Temperature - operating	-10 to +60°C
Temperature - storage	-40 to +70°C
IP rating (from the front)	IP65

#### **Power Supply**

**Nominal Input** 12-24VAC or DC

#### Display

Number of digits

Digit height 12mm [0.47"]

Number of message characters

Backlight colours Red, Green, White LCD display Positive or Negative

#### **Outputs**

Max voltage 34V Max current 500mA Analogue output 4-20mA

Certification UL, cUL, CE

## **Part Numbers:**

APM-PROC-APO APM Process Meter, Positive LCD with outputs APM-PROC-ANO APM Process Meter, Negative LCD with outputs 022128-01 **USB** Cable

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