## Trumeter ADM Series CT Meters



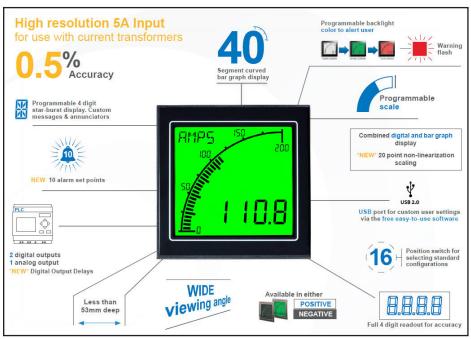
## For AC current measurement when using current transformers

NEW digital output delays NEW 10 alarm set points

**NEW 20-point non-linearization scaling** 

The CT Meter is designed specifically for use with current transformers. When used with an external current transformer, it can accurately measure current up to 10,000 amps. The CT Meter also provides a range of features including alarm set-points and three-color dynamic backlighting.

The customizable four-character message display and scalability enable users to tailor the meter to display critical parameters to any desired specifications. The setpoints, coupled with the backlighting, allow operators to be visually alerted when a parameter is out of range. The two outputs can be used to connect the ADM to other systems in the process.



## **Key features**

- 40-segment bar graph display
- · Large 4-digit display
- Separate starburst display area for annunciators, custom messages and alarm information
- · Dynamic backlight color

- User-adjustable backlight brightness and color (red, green, white)
- Wide viewing angle (horizontal and vertical)
- Custom annunciators
- Three-year warranty









## **Overview**

#### Measurement

- Current range (via external CT): 0-9,999 A
- Accuracy: 0.5 %

#### **Outputs**

- Max voltage: 34V
- Max current: 500mA
- Analog: 4-20 mA

#### **Power Supply**

• 12-24 VAC/VDC, 1.6 W

#### Free Configuration Utility Download

- PC utility via USB
- Basic configuration without PC (default setting is amps)

### **Display Options**

- Positive LCD (bright environments)
- Negative LCD (dark environments)

- Display range (Min and Max values)
- Custom annunciators
- User-selectable backlight color and intensity
- Two independent alarm set-points
- Two independent outputs
- 4-20 mA analog monitor output

# **Trumeter ADM Series CT Meters**



Trumeter ADM Series CT Meters Selection Guide			
Part Number	Price	Description	Drawing
ADM100C-LN	\$87.00	CT meter, programmable, with outputs, negative LCD display	PDF
ADM100C-LP	\$87.00	CT meter, programmable, with outputs, positive LCD display	

Trumeter ADM Series CT Meters Specifications			
Part Number	ADM100C-LN	ADM100C-LP	
	Power Supply		
Input	12 - 24 VAC or VDC		
Power Consumption	1.6	W	
Supply Frequency	50-40	00 Hz	
	Current Input		
Range (CT Output Current) <sup>1</sup>	0-8	5 A	
Range (via external CT)	0-9,9	999 A	
Accuracy	0.5	5 %	
	Disp	play	
User Configurable Backlight Colors	Red, Gre	en, White	
Positive/Negative LCD	Negative	Positive	
Readout Text Character Size	Four-digit display	y, 0.47 in [12mm]	
Message Text Character Size	Four-digit displa	y, 0.24 in [6mm]	
Bar Graph Character Size	40 segments, 0.24 in [6mm]		
	Environmental		
Operating Temperature	14 to 140°F [-10 to 60°C]		
Storage Temperature	-40 to 158°F [-40 to 70°C]		
Rating (from the front) IP65, NEMA		pe 4 and NEMA type 12	
	Analog Outputs (2)		
Analog Output	4-20 mA		
Accuracy	0.50% (full-scale of	deflection or FSD)	
Resolution	0.02 mA		
	Open Collecto	or Outputs (2)	
Max Voltage	34\/	/DC	
Max Current	500mA		
	Programming		
Programming Port	USB 2.0 (requires USB Type A to Type B cable, sold separately – USB-CBL-AB3, AB6, AB10 or AB15)		
	Agency Approvals		
Certification	UL File # E4	469787, CE	
	Mechanical		
Wire Connection Type	Screw Terminals		
Wire Gauge (Solid or Stranded)	18AWG to 12AWG (0.8 mm <sup>2</sup> - 3.3 mm <sup>2</sup> ). Torque 0.5-0.6 Nm [4.43-5.31 lb-in]		
Weight	6.35 oz (180g)		
Mounting Clips Screw Torque	<0.4 N•m	[3.54 lb•in]	

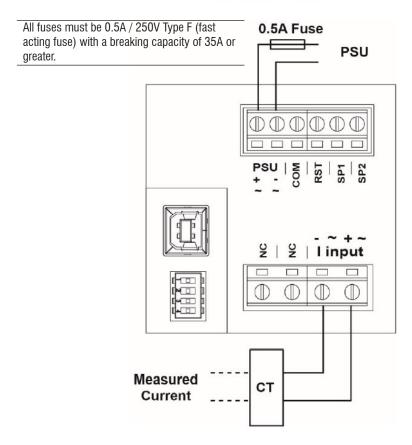
Note 1 - Caution: The ADM CT meter has been designed to be used with an external current transformer. Never connect the meter directly to a live circuit.

## **Trumeter ADM Series CT Meters**



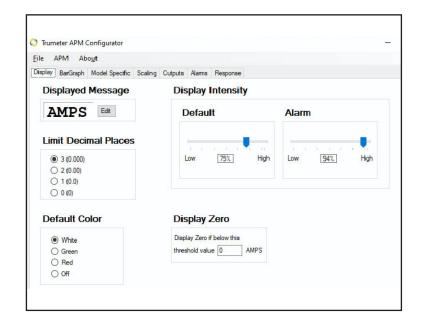
## Wiring Diagram

CT METER
Using Current Transformer



## **Easy-To-Use Configuration Tool**

Just plug into any USB port on your PC, run the free ADM Configuration application, and you're off.



## Trumeter ADM Series Process Meters

## trumeter innovation by design

## For industrial process monitoring applications

NEW digital output delays NEW 10 alarm set points

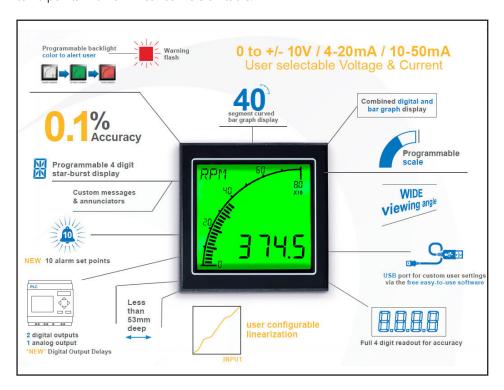
**NEW 20-point non-linearization scaling** 

Trumeter ADM Series Process Meters feature an acclaimed easy-to-read display and a versatile set of inputs, making them ideal for a wide range of industrial applications.

The programmable scale and custom annunciators allow users to tailor the meter to display critical parameters exactly as desired. In addition, dynamic backlighting, in conjunction with setpoints, alerts operators visually when a parameter is out of range. These meters also feature two outputs which can be used to control other systems in the process. The ADM Process Meter is much more than just a display.

Trumeter's innovative technology brings a greater level of accuracy to the ADM 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 ADM Configurator application which allows the user to configure up to 20 points in a non-linear conversion table.



## **Key features**

- 40-segment bar graph display
- Large 4-digit display
- Separate starburst display area for annunciators, custom messages and alarm information
- · Dynamic backlight color

- User-adjustable backlight brightness and color (red, green, white)
- Wide viewing angle (horizontal and vertical)
- Custom annunciators
- · Three-year warranty









## **Overview**

#### **Voltage Input**

- 0 to +/- 10VDC, impedance 100K $\Omega$
- Accuracy: 0.1 % of input or 5mV, whichever is greater

### **Current Input**

- 0-50 mA, impedance  $15\Omega$
- Accuracy: 0.01 % of input or  $5\mu\text{A}$ , whichever is greater

#### **Outputs**

Max voltage: 34V

Max current: 500mA

Analog: 4-20 mA

### **Power Supply**

• Nominal input: 12-24 VAC/VDC. 1.6 W

### Free Configuration Utility Download

- PC utility via USB
- Basic configuration without PC (default setting is volts)

#### **Display Options**

- Positive LCD (bright environments)
- Negative LCD (dark environments)

- Display range (Min and Max values)
- Custom annunciators
- · User-selectable backlight color and intensity
- Two independent alarm set-points
- Two independent outputs
- 4-20 mA analog retransmission output

# **Trumeter ADM Series Process Meters**



Trumeter ADM Series Process Meters Selection Guide			
Part Number	Price	Description	Drawing
ADM100P-LN	\$95.00	Process meter, programmable, with outputs, negative LCD display	<u>PDF</u>
ADM100P-LP	\$95.00	Process meter, programmable, with outputs, positive LCD display	PDF

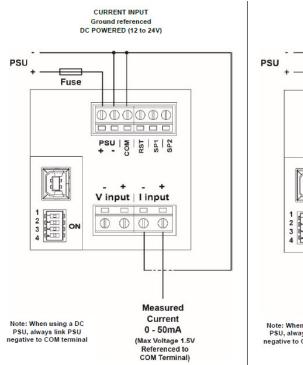
Trumeter ADM Series Process Meters Specifications			
Part Number	ADM100P-LN ADM100P-LP		
	Power Supply		
Input	12 - 24 VAC/VDC		
Power Consumption	1.6 W		
Supply Frequency	50-400 Hz		
	Voltage Input		
Range	0 to +/-10VDC		
Impedance	100ΚΩ		
Accuracy	0.1 % of input or 5mV, whichever is greater		
	Current Input		
Range	0 to 50 mA		
Impedance	15Ω		
Accuracy	0.01 % of input or 5μA, whichever is greater		
User Configurable Backlight Colors	<b>Display</b> Red, Green, White		
Positive/Negative LCD			
Readout Text Character Size	Negative Positive		
Message Text Character Size	Four digit display, 0.24 in [12mm]		
Bar Graph Character Size	Four-digit display, 0.24 in [6mm]		
Dai Graph Character Size	40 segments, 0.24 in [6mm]  Environmental		
Operating Temperature	14 to 140°F [-10 to 60°C]		
Storage Temperature	-40 to 158°F [-40 to 70°C]		
IP Rating (from the front)	IP65, NEMA type 4 and NEMA type 12		
Analog Outputs (2)			
Analog Output	4-20 mA		
Accuracy	0.50% (full-scale deflection or FSD)		
Resolution	0.50 % (Idil-Scale deflection of 1 SD)  0.02 mA		
	Open Collector Outputs (2)		
Max Voltage	34VDC		
Max Current	500mA		
	Programming		
Programming Port	USB 2.0 (requires USB Type A to Type B cable, sold separately – USB-CBL-AB3, AB6, AB10 or AB15)		
	Agency Approvals		
Certification	UL file # E469787, CE		
	Mechanical		
Wire Connection Type	Screw terminals		
Wire Gauge (Solid or Stranded)	18AWG to 12AWG (0.8 mm <sup>2</sup> - 3.3 mm <sup>2</sup> ). Torque 0.5-0.6 N•m [4.43-5.31 lb•in]		
Weight	6.35 oz (180g)		
Mounting Clips Screw Torque	< 0.4 N•m [3.54 lb•in]		

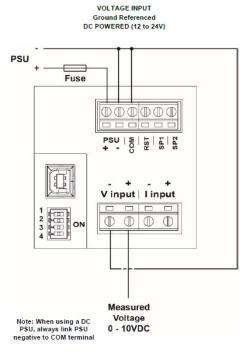
## Trumeter ADM Series Process Meters

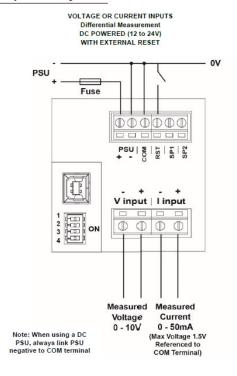


## **Wiring Diagrams**

All fuses must be 0.5A / 250V Type F (fast acting fuse) with a breaking capacity of 35A or greater.

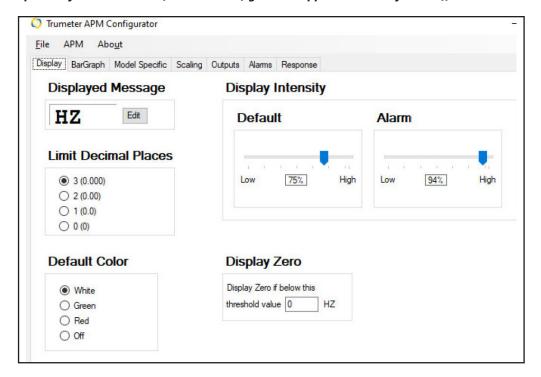






## **Easy-To-Use Configuration Tool**

Just plug into any USB port on your PC, run the free ADM Configuration application, and you're off.



Red flashing backlight at

high setpoint

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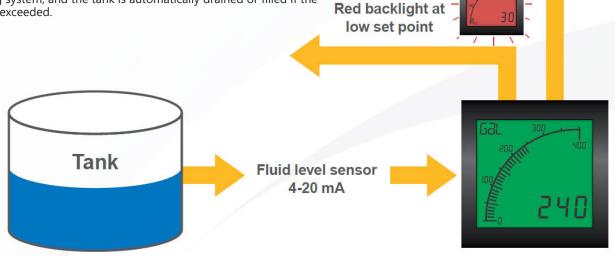
## Trumeter ADM Series Process Meters



## **Application Example: Fluid Level**

The ADM Process Meter is used to display the volume of fluid in the tank. The 4-20 mA analog output from the fluid level sensor is scaled to gallons and the custom annunciator is set to "Gal," all via the easy-to-use 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, thereby alerting the operator. Additionally, the ADM's digital outputs are integrated into the tank pumping system, and the tank is automatically drained or filled if the setpoints are exceeded.

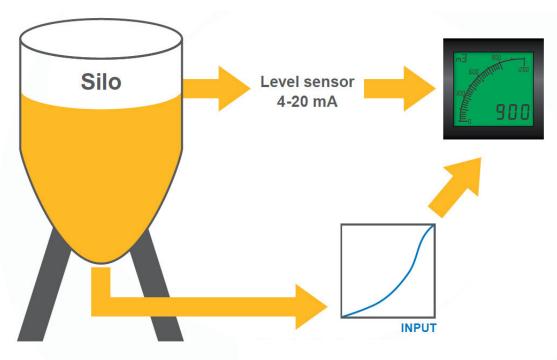


## **Application Example: Silo Volume**

The ADM 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 to measure cubic meters, and the annunciator is customized to m<sup>3</sup>, all via the easy-to-use software. Due to the irregular shape of the silo, the 20-point linearization 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 ADM Process Meter can be integrated into other systems for process control.



## Trumeter ADM Series Rate Meters



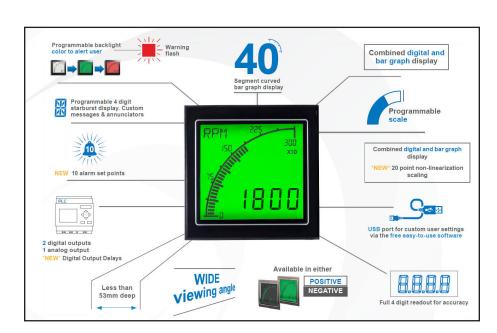
## Ideal for use in flow, production line and motor speed monitoring applications

NEW digital output delays
NEW 10 alarm set points
NEW 20-point non-linearization scaling

The ADM Rate Meter was developed for use in monitoring flow, production lines and motor speed. It combines the instant visual representation of an analog meter with the speed and accuracy of a digital meter.

The unique display is viewable in most environmental conditions. It features a programmable scale and color-changing backlight for instant recognition and precision measurement.

The ADM Rate Meter improves safety and efficiency through user-programmable alarm set-points, dynamic backlighting and starburst messaging that alerts operators of changing conditions instantly. It features digital and analog outputs to communicate with other components in a system, IP65 and NEMA type 4 and 12 ratings and an industry leading three-year warranty.



## **Key features**

- 40-segment bar graph display
- · Large 4-digit display
- Separate starburst display area for annunciators, custom messages and alarm information
- Dynamic backlight color

- User-adjustable backlight brightness and color (red, green, white)
- Wide viewing angle (horizontal and vertical)
- Custom annunciators
- Three-year warranty









## **Overview**

#### Measurement

- Max frequency: 60kHz
- Min frequency: 0.001 Hz
- Accuracy: 0.01 %

#### Max Working Voltage

• Input-COM: 36 VDC

#### **Outputs**

- Max voltage: 34V
- Max current: 500mA
- Analog: 4-20 mA

### **Power Supply**

• 12-24 VDC, 1.6 W

#### Free Configuration Utility Download

- PC utility via USB
- Basic configuration without PC (default setting is Hertz)

### **Display Options**

- · Positive LCD (bright environments)
- Negative LCD (dark environments)

- Scale and Gain
- Custom annunciators
- · User selectable backlight color and intensity
- Two independent alarm set-points
- Two independent outputs
- 4-20 mA analog monitor output

# **Trumeter ADM Series Rate Meters**



Trumeter ADM Series Rate Meters Selection Guide			
Part Number	Price	Description	Drawing
ADM100R-LN	\$95.00	Rate meter, programmable, with outputs, negative LCD display	
ADM100R-LP	\$95.00	Rate meter, programmable, with outputs, positive LCD display PDF	

Trumeter ADM Series Rate Meters Specifications			
Part Number	ADM100R-LN	ADM100R-LP	
	Measurement		
Max Frequency	60k		
Min Frequency	0.00	1 Hz	
Logic 0	<1.	2 V	
Logic 1	> 2	.0 V	
Accuracy	±0.01% (full-scale	deflection or FSD)	
Max Working Voltage (input - COM)	36V	/DC	
	Power	Supply	
Nominal Input	12-24	VDC	
Power Consumption	1.6	S w	
	Disp	play	
Display Update Time	0.1 to 9	999.9 s	
Scaling Factor	-100 to 1	1990x10	
User Configurable Backlight Colors	Red, Green, White		
Positive/Negative LCD	Negative	Positive	
Readout Text Character Size	Four-digit display, 0.47 in [12mm]		
Message Text Character Size	Four-digit display, 0.24 in [6mm]		
Bar Graph Character Size	40 segments, 0.24 in [6mm]		
	Environmental		
Operating Temperature	14 to 140°F [-10 to 60°C]		
Storage Temperature	-40 to 158°F [-40 to 70°C]		
IP Rating (from the front)	IP65, NEMA type 4 and NEMA type 12		
	Outputs		
Analog Output	4-20 mA		
Max Voltage	34VDC		
Max Current 500m.		mA	
	Programming		
Programming Port	USB 2.0 (requires USB Type A to Type B cable, sold separately – USB-CBL-AB3, AB6, AB10 or AB15)		
	Agency Approvals		
Certification	UL file # E469787, CE		
	Mechanical		
Wire Connection Type	Screw terminals		
Wire Gauge (Solid or Stranded)	18AWG to 12AWG (0.8 mm <sup>2</sup> - 3.3 mm <sup>2</sup> ). Torque 0.5-0.6 N•m [4.43-5.31 lb•in]		
Weight	6.35 oz (180g)		
Mounting Clips Screw Torque	<0.4 N•m [3.54 lb•in]		

www.automationdirect.com

+VE OUT terminal is internally directly

connected to the PSU+ terminal. The voltage available on the +VE OUT terminal will be 1V less than the voltage on the PSU+ terminal

12 to 24V DC PSU

## **Trumeter ADM Series Rate Meters**



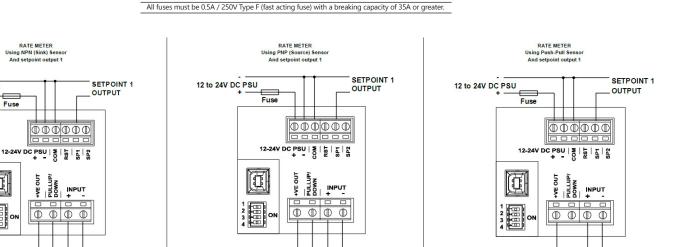
## **Wiring Diagrams**

RATE METER Ising NPN (Sink) Sensor And setpoint output 1

DOWN PULLUP/

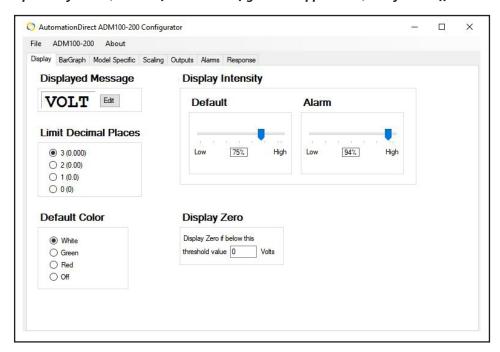
**1 1** 

even to the PSU+ terminal will be 1V less than the voltage available on the +VE OUT terminal will be 1V less than the voltage on the PSU+ terminal



## **Easy-To-Use Configuration Tool**

Just plug into any USB port on your PC, run the free ADM Configuration application, and you're off.



Output

connected to the PSU+ terminal. The voltage available on the +VE OUT terminal will be 1V less than the voltage on the PSU+ terminal

+VE OUT terminal is internally directly

# **Trumeter ADM Series Temperature Meters**

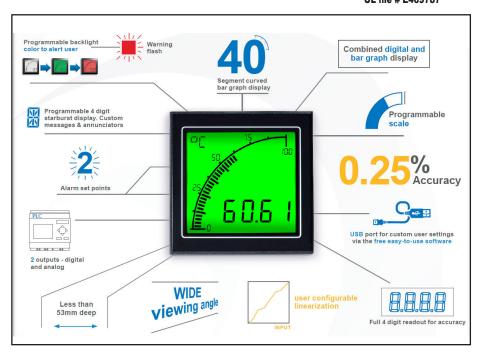
## For use with thermocouples

Featuring an acclaimed easy-to-read display and a versatile set of inputs, the Trumeter temperature meters take the ADM series into a wide range of new industrial applications.

The programmable scale and custom annunciators allow users to tailor the meter to display critical parameters exactly as desired, while the dynamic backlighting, in conjunction with setpoints, allows operators to be visually alerted when a parameter is out of range.

The two outputs can be used to control other systems in the process, meaning the ADM Temperature Meter is much more than just a display.

Trumeter's innovative input signal optimization achieves accuracy of 0.25% for precise measurement, display and control. Designed for use with thermocouples, the Temperature meter allows the user to configure up to 20 points in a non-linear conversion table via the ADM Configurator application in addition to the built-in thermocouple linearization.



## **Key features**

- 40-segment bar graph display
- · Large 4-digit display
- Separate starburst display area for annunciators, custom messages and alarm information
- · Dynamic backlight color

- User-adjustable backlight brightness and color (red, green, white)
- Wide viewing angle (horizontal and vertical)
- · Custom annunciators
- · Three-year warranty











## **Overview**

#### Thermocouple

- Type B, E, J, K, N, R, S and T
- Accuracy 0.25% of full scale

#### **Outputs**

Max voltage: 34V

Max current: 500mA

• Analog: 4-20 mA

## Power Supply

• 12-24 VAC/VDC, 1.6 W

### Free Configuration Utility Download

- PC utility via USB
- Basic configuration without PC (default setting is Centigrade [C])

#### **Display Options**

- Positive LCD (bright environments)
- Negative LCD (dark environments)

- Display range (Min & Max values)
- Custom annunciators
- User-selectable backlight color and intensity
- Two independent alarm set-points
- Two independent outputs
- 4-20 mA analog retransmission output

# **Trumeter ADM Series Temperature Meters**



Trumeter ADM Series Temperature Meters Selection Guide			
Part Number	Price	Description	Drawing
ADM100T-LN	\$110.00	Temperature meter for use with thermocouple, programmable, with outputs, negative LCD display	PDF
ADM100T-LP	\$110.00	Temperature meter for use with thermocouple, programmable, with outputs, positive LCD display	PDF

Trumeter ADM Series Temperature Meters Specifications			
Part Number	<u>ADM100T-LN</u>	<u>ADM100T-LP</u>	
	Measurement		
Input	Thermocouple Type B,	, E, J, K, N, R, S and T	
Accuracy	0.25% of full scale		
	Power Supply		
Nominal Input	12-24 VI	DC/VAC	
Max Power	1.6		
Frequency	DC or 50	0-400 Hz	
	Display		
User Configurable Backlight Colors	Red, Green, White		
Positive/Negative LCD	Negative	Positive	
Readout Text Character Size	Four-digit display		
Message Text Character Size	Four-digit displa		
Bar Graph Character Size	40 segments, 0.24 in [6mm]		
	Environmental Environmental		
Operating Temperature	14 to 140°F [-10 to 60°C]		
Storage Temperature	-40 to 158°F [-40 to 70°C]		
IP Rating (from the front)	IP65, NEMA type 4 and NEMA type 12		
		outs	
Max Voltage	34VDC		
Max Current		)mA	
Analog Output	4-20 mA		
	Programming		
Programming Port	USB 2.0 (requires USB Type A to Type B cable, sol		
	Agency A		
Certification	UL file # E469787, CE		
	Mecha		
Wire Connection Type	Screw to		
Wire Gauge (Solid or Stranded)	18AWG to 12AWG (0.8 mm <sup>2</sup> - 3.3 mm <sup>2</sup> ). Torque 0.5-0.6 N•m [4.43-5.31 lb•in]		
Weight	6.35 oz (180g)		
Mounting Clips Screw Torque	<0.4 N•m [3.54 lb•in]		

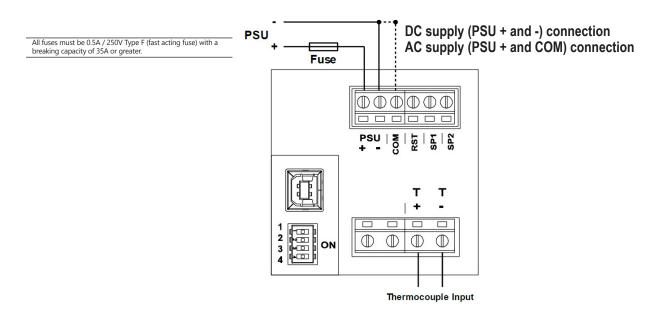
www.automationdirect.com Power Products tPWP\_25

# **Trumeter ADM Series Temperature Meters**



## **Wiring Diagrams**

### Thermocouple Input



## **Easy-To-Use Configuration Tool**

Just plug into any USB port on your PC, run the free ADM Configuration application, and you're off.

