Trumeter ADM Series CT Meters



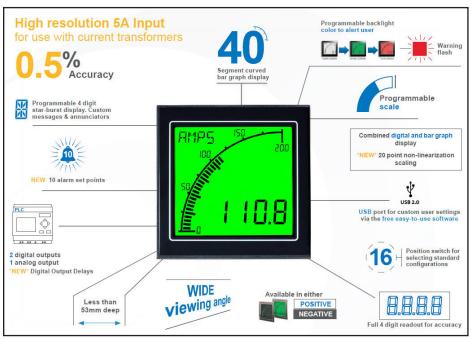
For AC current measurement when using current transformers

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	\$91.00	CT meter, programmable, with outputs, negative LCD display	<u>PDF</u>
ADM100C-LP	\$91.00	CT meter, programmable, with outputs, positive LCD display	<u>PDF</u>

Trumeter ADM Series CT Meters Specifications		
Part Number	ADM100C-LN	ADM100C-LP
	Power Supply	
Input	12 - 24 VA	AC or VDC
Power Consumption	1.6	W
Supply Frequency	50-40	00 Hz
	Current Input	
Range (CT Output Current) ¹	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 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 O	utputs (2)
Analog Output	4-20 mA	
Accuracy	0.50% (full-scale of	deflection or FSD)
Resolution	0.02 mA	
	Open Collector Outputs (2)	
Max Voltage	34VDC	
Max Current	500mA	
	Progra	mming
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)	tauge (Solid or Stranded) 18AWG to 12AWG (0.8 mm² - 3.3 mm²). 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]

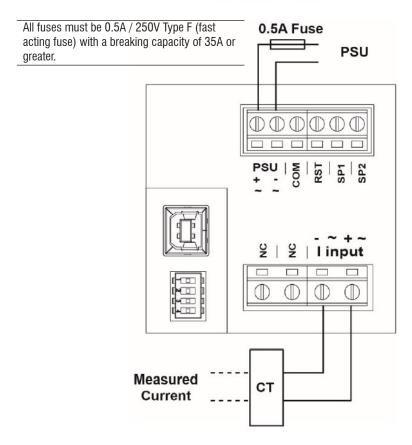
Note 1 - Caution: The ADM CT meter has been designed to be used with an external current transformer. Never connect the meter directly to a live circuit.

Trumeter ADM Series CT Meters



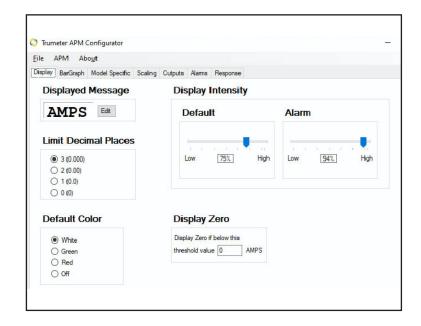
Wiring Diagram

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

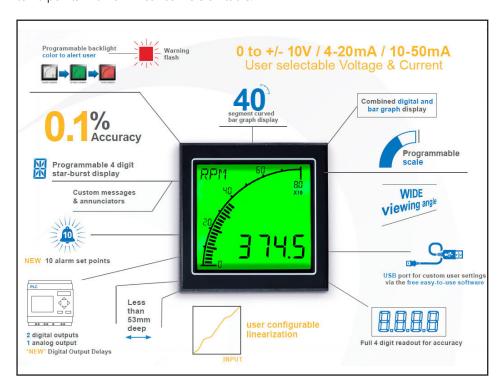
NEW 20-point non-linearization scaling

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 Ω
- Accuracy: 0.1 % of input or 5mV, whichever is greater

Current Input

- 0-50 mA, impedance 15Ω
- 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	\$100.00	Process meter, programmable, with outputs, negative LCD display	<u>PDF</u>
ADM100P-LP	\$100.00	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	100	ΚΩ	
Accuracy	0.1 % of input or 5mV	, whichever is greater	
	Curren	t Input	
Range	0 to 5	0 mA	
Impedance	15		
Accuracy	0.01 % of input or 5μA		
	Disp	•	
User Configurable Backlight Colors	Red, Gree		
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]		
a :: -	Environmental		
Operating Temperature	14 to 140°F [-10 to 60°C]		
	prage 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	esolution 0.02 mA		
Mars No Mars	Open Collecto		
Max Voltage			
Max Current	500mA		
Bus annualization Board	Programming		
Programming Port	USB 2.0 (requires USB Type A to Type B cable, sold separately – USB-CBL-AB3, AB6, AB10 or AB15)		
Contification	Agency Approvals		
Certification	UL file # E469787, CE		
Wine Composition To	Mechanical		
Wire Connection Type	Screw terminals		
Wire Gauge (Solid or Stranded)	18AWG to 12AWG (0.8 mm ² - 3.3 mm ²). 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]	

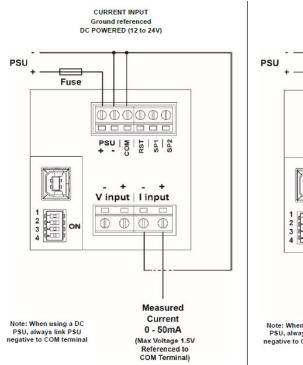
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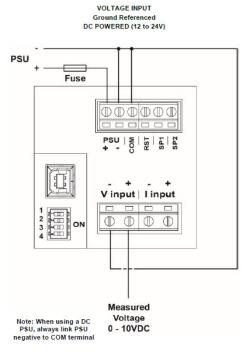
Trumeter ADM Series Process Meters

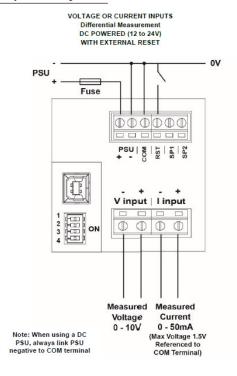


Wiring Diagrams

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

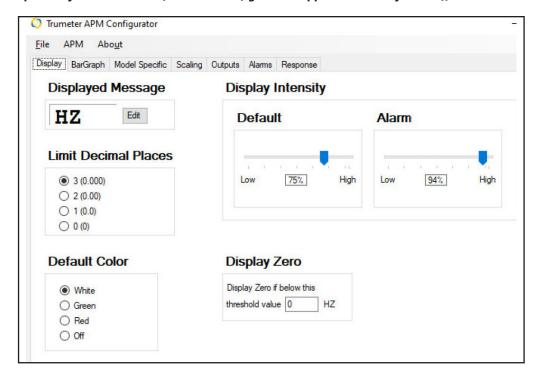






Easy-To-Use Configuration Tool

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

v I /

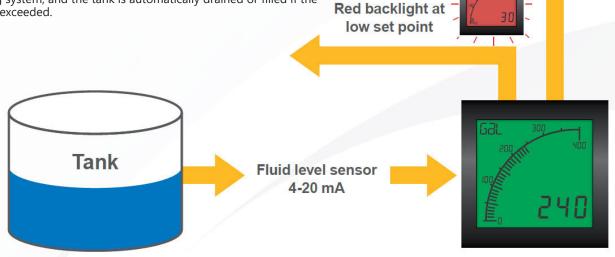
Trumeter ADM Series Process Meters



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.

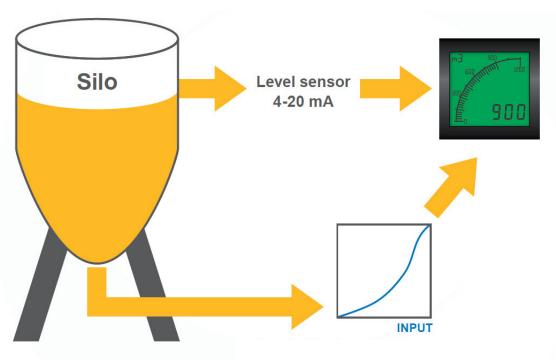


Application Example: Silo Volume

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 m³, 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



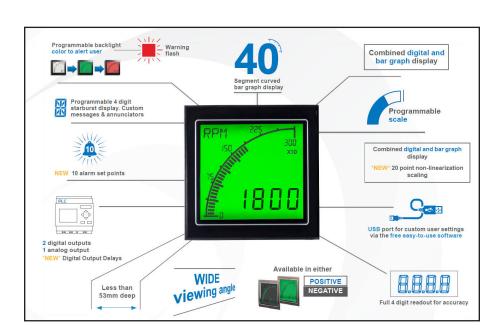
Ideal for use in flow, production line and motor speed monitoring applications

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	\$100.00	Rate meter, programmable, with outputs, negative LCD display	PDF
ADM100R-LP	\$100.00	Rate meter, programmable, with outputs, positive LCD display	PDF

Trumeter ADM Series Rate Meters Specifications		
Part Number	ADM100R-LN	ADM100R-LP
	Measurement	
Max Frequency	60kHz	
Min Frequency	0.00	01 Hz
Logic 0	<1	.2 V
Logic 1	> 2	2.0 V
Accuracy	±0.01% (full-scale	e deflection or FSD)
Max Working Voltage (input - COM)	36\	/DC
	Power	Supply
Nominal Input	12-24	4 VDC
Power Consumption	1.6	6 w
	Dis	play
Display Update Time	0.1 to 9	999.9 s
Scaling Factor	-100 to	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 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	
	Out	puts
Analog Output	4-20 mA	
Max Voltage	34VDC	
Max Current	500mA	
	Progra	nmming
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 ² - 3.3 mm ²). 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]	

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+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



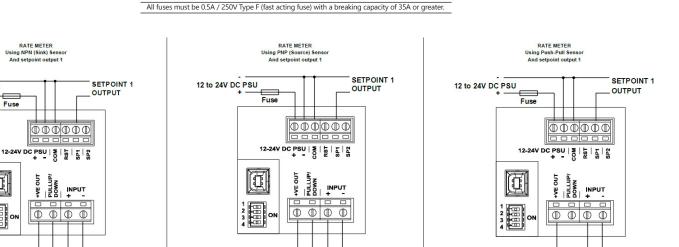
Wiring Diagrams

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

DOWN PULLUP/

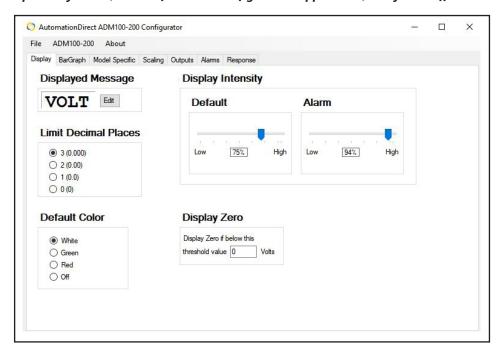
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even to the PSU+ terminal will be 1V less than the voltage available on the +VE OUT terminal will be 1V less than the voltage on the PSU+ terminal



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

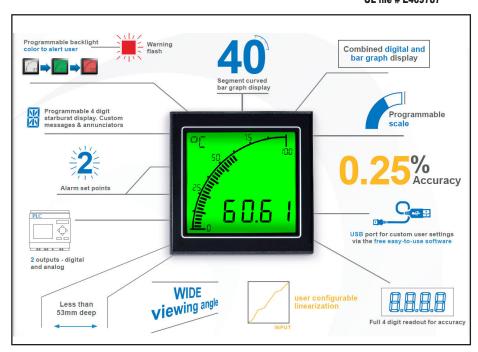
For use with thermocouples

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	\$115.00	Temperature meter for use with thermocouple, programmable, with outputs, negative LCD display	PDF
ADM100T-LP	\$115.00	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>	ADM100T-LP	
	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 V	DC/VAC	
Max Power	1.6	5 W	
Frequency	DC or 50	0-400 Hz	
	Dis	play	
User Configurable Backlight Colors	Red, Green, White		
Positive/Negative LCD	Negative	Positive	
Readout Text Character Size	Four-digit displa	y, 0.47 in [12mm]	
Message Text Character Size	Four-digit displa	ay, 0.24 in [6mm]	
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		
	Outputs		
Max Voltage	34VDC		
Max Current	500)mA	
Analog Output	4-20 mA		
	Progra	mming	
Programming Port	USB 2.0 (requires USB Type A to Type B cable, sol	ld 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 ² - 3.3 mm ²). 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]		

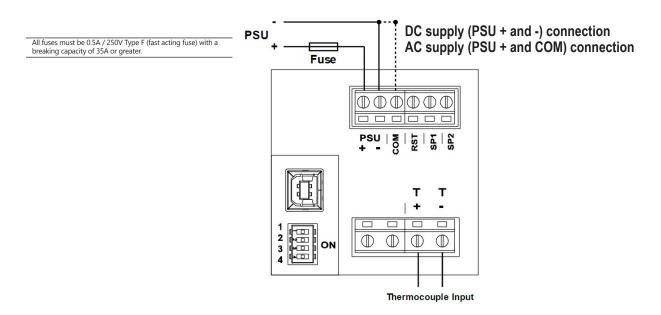
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Trumeter ADM Series Temperature Meters



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.

