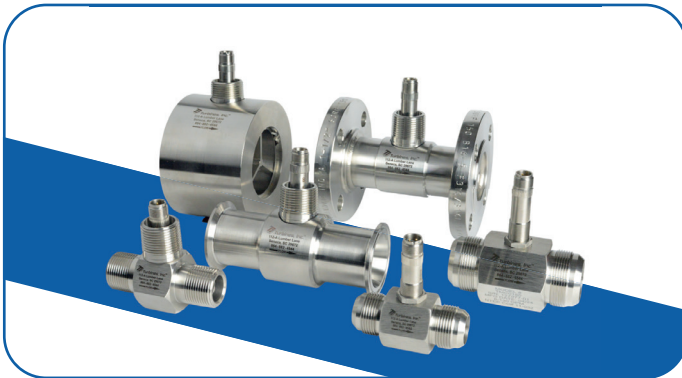




TURBINES INCORPORATED **PRODUCTS OVERVIEW**

HIGH ACCURACY TURBINE FLOW METERS



- » Vertical or horizontal installation
- » Low Pressure Drop
- » NIST Traceable Calibration
- » CRN Certified

Sizes

1/2 to 12"

Temperature Range

-450°F to +450°F
(+850°F with special coil)

Standard Endfittings

AN Flare, NPT, Flanged,
Sanitary (consult factory for
other options)

Flowrates

1 to 12,000gpm

Accuracy

Linearity: $\pm 0.5\%$
 ± 0.25 available on request
Repeatability: $\pm 0.1\%$

Standard Material

316 Stainless steel 17-4PH, 440C
Stainless steel or Duplex

HIGH ACCURACY WAFER



- » Vertical or horizontal installation
- » Low Pressure Drop
- » NIST Traceable Calibration
- » CRN Certified

Sizes

1 to 4"

Temperature Range

-450°F to +450°F
(+850°F with special coil)

Standard Endfittings

Fits between two existing flanges,
Installation kits available

Flowrates

4 to 1,250gpm

Accuracy

Linearity: $\pm 0.5\%$
 ± 0.25 available on request
Repeatability: $\pm 0.1\%$

Standard Material

316 Stainless steel 17-4PH, 440C
Stainless steel or Duplex

CRYOGENIC FLOW METERS



- » Vertical or horizontal installation
- » Low Pressure Drop
- » NIST Traceable Calibration
- » CRN Certified
- » NTEP Certified, NMI Netherlands Certified
- OIML R117, R81, MID

Sizes

1/2 to 12"

Temperature Range

-450°F to +450°F

Standard Endfittings

AN Flare, NPT, Flanged, Wafer, Sanitary (consult factory for other options)

Flowrates

1 to 12,000gpm

Accuracy

Linearity: $\pm 0.5\%$
 ± 0.25 available on request

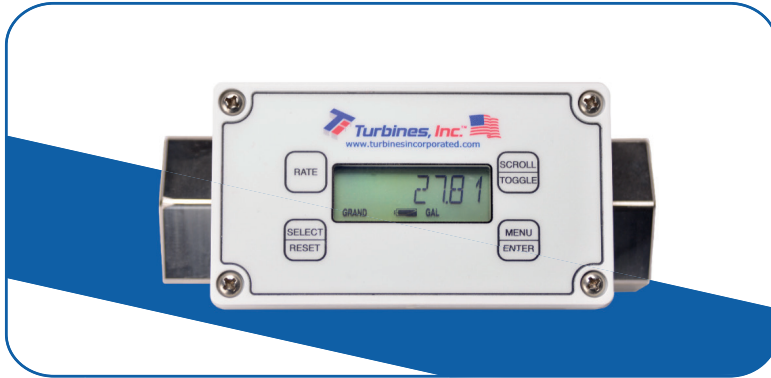
Repeatability: $\pm 0.1\%$

Standard Material

316 Stainless steel, Nickel 200, 17-4PH, 440C Stainless steel



INTEGRATED ELECTRONICS FLOW METERS



- » Vertical or horizontal installation
- » NIST Traceable Calibration
- » Low Profile compact design

Sizes

7/8" to 1"
Consult factory for other sizes

Temperature Range

-22°F to 150°F

Standard Endfittings

FNPT

Flowrates

7/8" = 3 to 30gpm
1" = 5 to 50gpm

Accuracy

Linearity: $\pm 1.0\%$
Repeatability: $\pm 0.1\%$

Standard Materials

316 Stainless steel, 416 Stainless steel,
CD4MCu, Tungsten Carbide



LOW FLOW SERIES FLOW METERS



- » Vertical or horizontal installation
- » NIST Traceable Calibration
- » Encapsulated Version Available for High Pressure, Low Temperature
- » Liquid and Gas Measurement

Orifice Sizes

0.020 to 0.175"

Temperature Range

-450°F to 450°F
(+525°F with special coil)

Standard Endfittings

NPT, AN Flare

Flowrates

.007 to 3gpm

Repeatability

± 0.25%

Standard Material

316 Stainless steel, 17-4PH,
440C Stainless steel

GAS FLOW METERS



- » Vertical or horizontal installation
- » Low Pressure Drop
- » NIST Traceable Calibration
- » CRN Certified

Sizes

1 to 12"

Temperature Range

-450°F to 450°F

Standard Endfittings

Grooved, NPT, Flanged, Wafer
(Consult factory for other options)

Flowrates

0.5 to 12,000 ACFM

Accuracy

Linearity: ± 1.0%
Repeatability: ± 0.1%

Standard Materials

316 Stainless steel, 17-4PH,
440C Stainless steel

SANITARY SERIES FLOW METERS



- » CIP/SIP
- » 3A Certified
- » Vertical or horizontal installation
- » NIST Traceable Calibration
- » CRN Certified

Sizes

1/2 to 3"

Flowrates

1.25 to 650gpm

Temperature Range

-100°F to 450°F

Accuracy

Linearity: $\pm 0.5\%$

Repeatability: $\pm 0.1\%$

Standard Endfittings

Sanitary

Standard Material

316 Stainless steel

17-4 PH Stainless steel, Rulon®,
Carbon Composite



QUICK CHANGE METER



- » Field servicable internals without removing meter from the line
- » Vertical or horizontal installation
- » NIST Traceable Calibration
- » Low Maintenance Cost

Standard Sizes

1 or 2"

Temperature Range

-40°F to 300°F

Standard Endfittings

NPT, Grooved, Flanged,

Flowrates

5-225gpm

Accuracy

Linearity: $\pm 1.5\%$
Repeatability: $\pm 0.15\%$

Standard Material

316 Stainless steel, 17-4PH,
Duplex Stainless steel, 440C Stainless
steel, Ceramic, Tungsten carbide



TM SERIES LIQUID FLOW METER

TM Series



- » Vertical or horizontal installation
- » CRN Certified
- » Economical solution with quick delivery
- » NIST Traceable Calibration

Size

3/8 to 10"

Temperature Range

-100° to 250°F
(850°F with special coil)

Standard Connections

Flanged, Grooved, NPT
(Consult factory for other options)

Flowrates

From 0.3-5,500gpm
(10-190,000 bpd)

Accuracy

Linearity: $\pm 1.0\%$
Repeatability: $\pm 0.1\%$

Standard Materials

316 Stainless steel,
CDMCu, 416 Stainless
steel, Tungsten Carbide

WM SERIES LIQUID FLOW METER

WM Series



- » Vertical or horizontal installation
- » Economical and Space Efficient
- » CRN Certified
- » NIST Traceable Calibration

Sizes

3/8 to 10"

Temperature Range

-100° to 250°F
(850°F with special coil)

Standard Endfittings

Fits between two flanges,
Installation kits available

Flowrates

0.3-5,500gpm
(10-190,000 bpd)

Accuracy

Linearity: $\pm 1\%$
Repeatability: $\pm 0.1\%$

Standard Material

316 Stainless steel, CDMCu, 416
Stainless steel, Tungsten Carbide

HIGH PRESSURE FLOW METER



- » Pressure up to 15,000 psi
- » NIST Traceable Calibration
- » Vertical or horizontal installation
- » CRN Certified

Sizes

2 or 3"

Temperature Range

-100°F to 250°F

Standard Endfittings

1502 Hammer Union
end connection

Flowrates

15-600gpm

Accuracy

Linearity: $\pm 1\%$

Repeatability: $\pm 0.1\%$

Standard Material

A286 Stainless steel, 316 Stainless
steel, CD4MCu, Tungsten Carbide

FLOW MONITORS



- » Intrinsically Safe Available
- » Three micro-switch keys with UV - resistant polyester key pad
- » Suitable for direct or remote mount
- » Temperature & Pressure Compensation Available

Power

6 - 30V DC or 4-20mA
Loop-powered, Lithium Battery
Pack

Physical Dimensions

5.1" x 4.7" x 2.9"

Outputs

Pulse or 4-20mA output

Temperature Rating

-40°F to 158°F

Display Size

3.5" x 1.6"

Communication

Modbus RS485,
Free configuration software

Signal Input

0 - 7000 Hz

FLOW MONITORS



FML250

- » Temperature Compensation Available
- » 2 -40 Point Linearization
- » Independent Rate Indicator and Totalizer
- » Built-in test system for diagnostics
- » Backlit Display
- » Intrinsically Safe Version Available
- » Operating Alarms

Power

7.5-36V DC or 4-20mA loop-powered,
Lithium Battery Pack, Polarity protected

Enclosure

NEMA 4X or IP66,

Outputs

Pulse or 4-20 mA

Temperature Rating

Operating: -22°F to 150°F

Signal Input

0-6000Hz



E Series

- » Explosion Proof
- » Temperature & Pressure Compensation Available
- » Through Glass Programmable
- » Backlit Display
- » Direct or Remote Mounting

Power

9 - 27V DC or 4-20mA
Loop-powered, Lithium Battery
Pack

Physical Dimensions

5.1" x 4.7" x 2.9"

Outputs

Pulse or 4-20mA

Temperature Rating

-40°F to 158°F

Display Size

3.5" x 1.6"

Communication

Modbus RS485,
Free configuration software

CRYOGENIC DELIVERY SYSTEMS

CDS2000



- » 4 softkeys and embedded resistive touchscreen
- » Multiple tickets with customization options
- » NTEP Certified, IP67
- » Automatic maintenance reminders
- » Real-Time detail diagnostics & alarm screens
- » No heater or battery required

Control & Communication

Pump Control (1) Form C 5A relay,
Alarm (1) Form C 5A relay,
Spare Form C 5A relay,
RS232 & Bluetooth communications,
Real-Time data streaming,
USB front panel port

Physical Dimensions

10.5" x 8.9" x 2.75"

Operating Temperature

-40°F to 125°F

Signal Input

Frequency Range: 0 – 2500Hz,
Sensitivity: 15mv RMS @ 10Hz (min)
Impedance: Approx. 14 Ohms
Noise immunity: FCO @ 2.5KHz
Optional dual pickup

Sensor Inputs

100, 1K, 10K RTD, Silicon Diode
and 4-20mA

Display

800 X 480 full color graphic

Power

9 to 26 VDC Polarity insensitive

CDS1000



- » Real-Time calculations & graphics
- » Multiple tickets with customization options
- » Simple menu driven programming
- » 4 softkeys and standard keypad
- » NTEP Certified, IP67, NMI Netherlands Certified
OIML R117, R81, MID

Control & Communication

Pump Control (1) Form C 2A relay
Alarm (1) Form C 2A relay
RS232 & Bluetooth

Physical Dimensions

10.5" x 8.9" x 2.75"

Signal Input

Frequency range: 0-2500Hz
Sensitivity: 15mv RMS @ 10Hz (min);
50mv RMS @ 500Hz (min); 400mv
RMS @ 2.5KHz (min)
Optional dual pickup

Sensor Inputs

100, 1K, 10K RTD

Operating Temperature

-13°F to 125°F

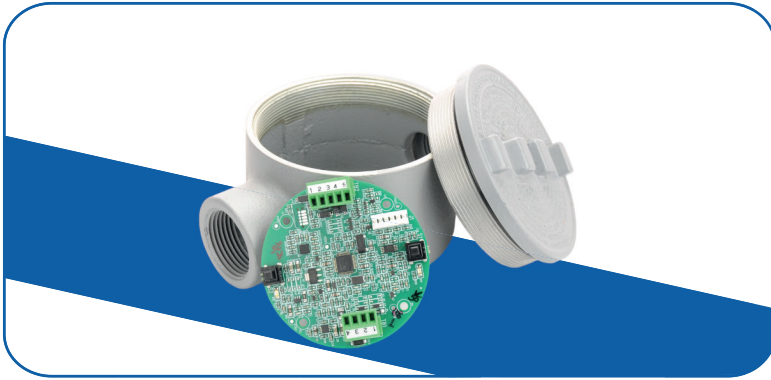
Display

Backlit 240x128 graphic
display

Power

9-26 VDC with self-resetting fuse.
Polarity insensitive, NiMH Battery

INDUSTRIAL SERIES SIGNAL CONDITIONERS



- » Output Proportional to Flow
- » Short Circuit Protection
- » Explosion Proof Enclosure
- » Sensitivity Field Adjustable
- » Economical

Analog Signal Conditioners

Input voltage: 7 VDC – 38 VDC
Outputs: 0-10 V or 0-5 V, 4-20 mA
Frequency: 0-10 kHz
Sensitivity: 5mV or 20mV minimum
Operating Temperature: -40°F to 185°F
Installation: Meter mount

Digital Signal Conditioners

Input voltage: 5 VDC – 30 VDC
Output Voltage: 5 V, 10 V, Voltage following
Frequency: 0-10 KHz
Sensitivity: 5mV or 20mV minimum
Operating Temperature: -40°F to 185°F
Installation: Meter mount





CONTACT

Thank you for your interest in Turbines Incorporated.

Please visit our website and fill out the contact us form as accurately as possible to be connected to the right department for follow-up. For more immediate questions or custom engineered solutions call us using the phone number listing below.

✉ Sales@turbinesincorporated.com



15935 Highway 283 N.
Altus, Oklahoma 73522, USA
Tel: +1-580-477-3067
www.turbinesincorporated.com



112 Lumber Ln.
Seneca, SC 29672 USA
Tel: +1-864-882-4544
www.turbinesincorporated.com



960 South Meadow Ave.
Odessa, TX 79761 USA
Tel: +1-432-333-4800
www.turbinesodessa.com



800 Wellington Avenue
Cranston, RI 02910, USA
Tel: +1-401-461-6366
www.primaryflowsignal.com



2236 80th Avenue NW,
Edmonton, AB T6P 1N2
Tel: 877-661-3569
www.pfscanada.ca