

# FML250 Liquid Flow Monitor

## Highly Accurate and Reliable Temperature Compensated Liquid Measurement

**T**urbinex, Inc. is a leader in the design and manufacture of reliable and accurate turbine flow metering equipment, electronic monitors, and accessories. All of our products are engineered, manufactured, and calibrated using premium quality materials by a skilled team of dedicated professionals, using state-of-the-art equipment.

The **FML250 Liquid Flow Monitor** is designed specifically for liquid applications to accurately compute and display actual flow parameters. The system operates seamlessly with our TM Series flow meters to deliver quality results for various application requirements. The FML250 monitor is front keypad programmable, features an LCD display, and allows for 2-40 point linearization for enhanced metering accuracy.



The FML250 can calculate liquid flow in multiple engineering units, including mass, and has selections for flow meter pulse inputs.

This battery-powered monitor can be electronically adjusted to reduce noise, providing optimal accuracy, mobility, and high-precision reliability for liquid monitoring requirements.

### FML250 Features

**Factored pulse output:**  
(150mA, 30VDC max)

- Opto-isolated open collector output
- Frequency or fixed pulse width: 2, 5, 10, 50, 100, 250, 500, & custom mS
- Pulse output divider: 1, 10, 100, 1000, & custom
- Pulse output multiplier: x100(0.01), x10(0.1)

**Factored rate output:** (4-20mA)  
+/- 0.3% reading

- Scalable low and high programmable
- Loop powered operation (7.5-36VDC)

**Display:**  
+/- 0.01% reading (rate)  
or +/- 1 count (total)

- Rate display:** auto-ranging
- Input Impedance:** 10k ohms

**Temperature Compensation:**  
-328° F to +1,000° F

- Accuracy +/- 0.03%  
(full scale at 75° F)

**Power modes:**

- External loop powered and reverse polarity protected

**Operating Temperature:**  
-22° F to +150° F

- Signal Input:** 0-6000Hz,  
50mV-36V (field adjustable)

# Data Sheet

## FML250

### Specifications

Performance Data	
Linearization	2-40 points
Refresh Rate	Continuous to 2 seconds
Pulse Input	Supports sine wave
Keypad	Front panel
Power	Battery powered operation and selectable power modes. Lithium primary D cell battery standard, alkaline 1.5 D clip available
Testing	Built-in test system for diagnostics, pulse output, and 4-20mA output testing
Rate Display Units	Per second, minute, hour, day, or custom
Maintenance	Automatic reminders and flow rate warnings
Materials	
Mounts	Direct turbine, wall, or swivel
Weight	2 lbs
Data Storage	EEPROM parameter storage Secondary storage location for parameters and linearization table

The FML250 Product Family			
	Meter Mount (None)	Swivel Mount (SM)	Wall Mount (W)
<b>Options</b>			
Standard Pulse Output	FML250-P	FML250-P-SM	FML250-P-W
4-20mA Loop Output (4)	FML250-P4	FML250-P4-SM	FML250-P4-W
Linearization (2-40 point)	FML250-PL	FML250-PL-SM	FML250-PL-W
Pulse, 4-20mA, Linearization	FML250-P4L	FML250-P4L-SM	FML250-P4L-W
Temperature Compensation	FML250-PTC	FML250-PTC-SM	FML250-PTC-W

### Support and Service

Our full-time, dedicated service group offers 100% trustworthy support and recertification for flow meters — whether our own or a competitor's brand. Our meter proving services are performed by our trained technicians and the latest testing equipment. Custom meters and instrumentation options for your application are readily available. Many of our products are in stock and ready for immediate shipment.

### Certifications

Turbines, Inc.'s quality management systems are ISO 9001 and AS 9100 compliant.

### Worldwide Support

We serve customers worldwide delivering proven differential and turbine meters, and fire suppression solutions. Our U.S. offices are located in Rhode Island (headquarters); Houston and Odessa-Midland, TX; Tulsa and Altus, OK; Seneca, SC. We also have offices in Edmonton, Alberta, Canada; Beijing, China; and Dubai, United Arab Emirates.

**Contact your Turbines, Inc. Field Application Engineer for assistance.**



**All Turbines, Inc. products are proudly made in the U.S.A.**



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