

Sensus Turbo Monitor



The Turbo Monitor connects directly to a Sensus Auto-Adjust Turbo-Meter (AAT). It performs all the ATT algorithms to compute the self-checking and self-adjusting equations.

You can remotely monitor outputs for adjusted volume pulses and adjusted volume flow rate or Delta-A. Level 1 and Level 2 Delta-A alarms are also available as outputs and for viewing on the integral alphanumeric display. The Turbo Monitor is approved for Class 1, Div-2 operation, so you can mount it directly to the meter's instrument drive to record mechanical uncorrected volume.

Since MasterLink is the primary interface software, technicians may already be familiar with how to access instrument data. MasterLink also provides live graphing of main rotor frequency, sensing rotor frequency, Delta-A and adjusted volume flow rate – all on a single graph.

Additional features

- Available with high frequency output
- Level 1 and Level 2 Delta-A alarms with separate Form-A output channels with user-defined alarm limits
- Pulsating gas alarm
- Adjusted volume pulses (Form-A output)
- 4-20 mA output signal for either Delta-A or adjusted volume rate flow
- 4-year warranty
- Wall Mount (shown), meter mount and pipe mount options available
- Full curve linearization for up to 7 flow rates at a specified pressure

Sensus Turbo Monitor

Providing local or remote access to turbine meter data.

General description

The primary component, the Turbine Interface Board (TIB), provides an excitation voltage to the sensors, inputs the pulses from the AAT sensors, computes the algorithms, and provides output volume pulses along with a 4-20 mA signal.

The Turbo Monitor provides several RS-232 serial data ports for local or remote communications. Through a serial connection, MasterLink software simultaneously graphs main rotor frequency, sensing rotor frequency, Delta-A, and adjusted volume flow rate. The live graphing

feature enables quick and easy meter proving.

The Turbo Monitor also provides output for Form-A adjusted volume pulses to a RTU (or pulse accumulator), 4-20 mA signal (representing either adjusted volume flow rate or Delta-A), plus independent alarm channels for normal and abnormal alarms.

Power supplies

- 120 VAC PS with alkaline battery (Div-2)
- 120 VAC PS and I.S. barriers with alkaline battery (Div-1)
- Solar panel and rechargeable battery 10-30 VDC via regulator board (Div-2)

New parameters

configured into separate item codes

- AAT serial number
- Mechanical output factor (Kmo)
- Main rotor factor (Km)
- Sense rotor factor (Ks)
- Average relative adjustment (Abar)

Computed parameter

(available as separate item codes)

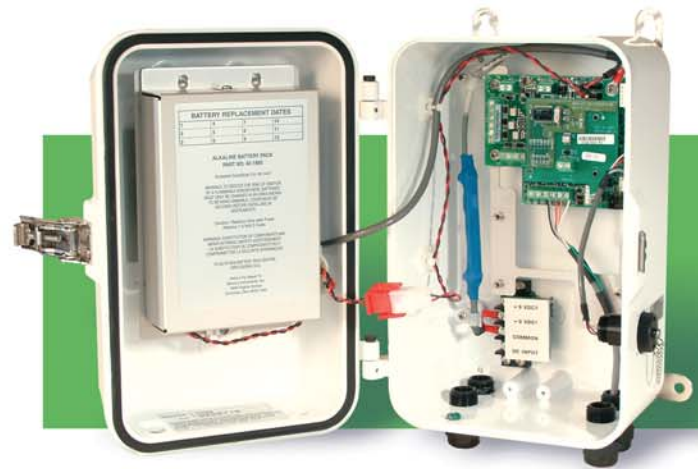
- Adjusted volume
- High resolution adjusted volume
- Unadjusted volume
- Adjusted volume flow rate
- Unadjusted volume flow rate
- Instantaneous Delta-A
- Average Delta-A
- Main rotor frequency
- Sensing rotor frequency

Alarms

- Level 1 Delta-A alarm
- Level 2 Delta-A alarm
- Pulsing gas alarm
- Internal fault

Outputs

- Level 1 Delta-A alarm (Form-A alarm pulse)
- Level 2 Delta-A alarm (Form-A alarm pulse)
- Adjusted volume (Form-A volume pulse)
- Adjusted volume flow rate or Delta-A (4-20 mA analog)
- Main rotor frequency (buffered)
- Sensing rotor frequency (buffered)
- Adjusted flow rate via optional Turbo Frequency Board



LCD/pushbutton scroll items

default display = adjusted volume

- Alarms (if present)
- Display test
- Adjusted volume
- Unadjusted volume
- Battery voltage
- Delta-A

**SENSUS**

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