



Vantage 3000



Technical Brief

Description:

The Eastech Badger Vantage Model 3000 is a transit time ultrasonic flow meter to be used on full pipe applications from 1 inch to 8 inch. The 3000 comes complete with a graphic LCD display for flow, totals (unidirectional), velocity and programmed parameters. The 3000 is enclosed in a NEMA 4X enclosure with viewing window and has a 4-20mA output, and a RS-232 Modbus protocol serial output.

Applications:

The Vantage 3000 can be applied to full pipes of water, wastewater and industrial process fluids.

- **Water:** Distribution monitoring, billing and water wells.
- **Wastewater:** Lift stations, clarifier effluents, clarifier underflows and sludges (RAS, WAS).
- **Industrial process:** In plant monitoring of process fluids, transportation lines, HVAC. Hot and chiller water.
- **Irrigation:** Sprinkler systems

Enclosure:

The Model 3000 comes standard with a NEMA 4X/IP66 enclosure. The enclosure has a hinged viewing window and a separate compartment for wiring. There are three conduit holes in the bottom of the enclosure for 1/2" conduit fittings. Enclosure options are heater and thermostat for cold weather outdoor use and keylock for the hinged window.

Sensor Mounting:

- V30S Strap on Sensors with Veeshot mounting rail. See associated technical brief for sensor specifications.



Programming:

The Vantage 3000 is easily calibrated to the user's application data. The 16 button keypad and the displayed information on the display will allow the user to program or adjust programming in the field without any additional equipment needed. Programming features as standard in the 3000 are:

- Main screen 4 page step through consisting of:
 - Flow & total meter status, signal strength, measurement parameters including Reynolds.
- Review last 8 days of minimum and maximum flows and totals.
- Listing of most pipes and wall schedules for application programming.

Features:

- **High Accuracy and Reliability**
- **Fast and Simple Programming**
- **8 Day Summary of Min / Max /Total**
- **3 Year Warranty**

Vantage 3000 General Specifications:

Enclosure:

Standard	Nema 4X polycarbonate Nonincendive Class I&II, Grps. A-D Div.2
Optional	Explosion proof, Aluminum, Class I, Grps. C & D, Class II, Grps. E,F,G Div. 1 & 2
Accessories	Heater and thermostat, Door Lock

Temperature:

Standard:	-4° F to 158° F (-20° C to 70° C)
With Heater:	-40° F to 158° F (-40° C to 70° C)

Electronics:

Outputs: 4-20 mA	Analog isolated into 800 ohms max, monitored to detect open circuits. RFI and gas discharge surge protection and two fuses.
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Serial Port:	RS232 1200-38400 Baud, Modbus? RTU protocol.
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DC power Out	12 VDC, 100 mA maximum
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Display:	4 line, 20 character backlit LCD 16 button programming keypad
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Power:	90 to 240 VAC, 50/60 Hz 12 to 28 VDC @ 480mA 50 watts std. W/heater 60 watts
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Power Supply	High immunity: Approvals CE, UL, CSA
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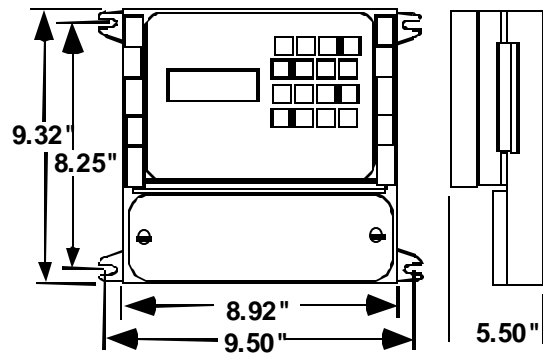
Accuracy:	Up to +/- 0.5% of actual flow above 1 FPS
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Linearity:	+/- 0.25%
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Repeatability:	0.25%
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Rangeability:	40 to 0.1 ft./sec.
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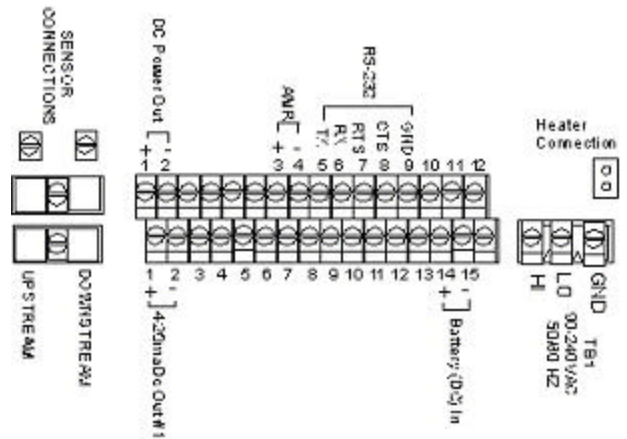
Turndown:	400:1
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Enclosure Mounting Dimensions



Graphic Display



Wiring Diagram