

Vantage 2220



technical brief

Description:

The Eastech Flow Controls Vantage Model 2220 is a dual channel ultrasonic level meter that can be programmed either for level and/or flow applications. The flow applications will include flumes, weirs or free flow equations.

The Vantage 2220 comes with a backlit LCD display, front panel programming keypad, two 4-20 mA outputs, RS232 and RS485 serial ports, up to five programmable relays and an internal data logger. The 2220 is housed in a NEMA 4X enclosure with viewing window.

Applications:

The Vantage 2220 can be applied to open channel flow measurement or fluid level measurement of water, wastewater or industrial process fluids.

- **As Flow Meter:** Dual influent/effluent of wastewater treatment plants, industrial effluent flows or any open channel flows in association with flumes or weirs.
- **As Level Meter:** Dual water tanks, chemical tanks or wet wells for level measurement up to 50 feet.

Enclosure:

The Vantage 2220 comes standard with a NEMA 4X/IP66 polycarbonate enclosure. The enclosure has a hinged viewing window and a separate access panel for wiring connections. There are three ½ inch conduit holes in the bottom of the enclosure for wiring. Enclosure options are heater and thermostat for cold weather outdoor use and key lock for the hinged window.

Sensor Styles:

- FB7, range 0-15ft, material Kynar
- FB5, range 0-25ft, glass filled polyester
- FB3, range 0-50ft, material ABS Plastic

See FB Ultrasonic Sensor Technical Brief for more detailed information.



Programming:

The Vantage 2220 is easily programmed to the user's application data. The 16 button keypad and the drill down menu selection allow the user to program or adjust various parameters in the field. Some of the programming features are:

- Selection of using one or two sensors for level and/or flow applications.
- Selection of 70 stored flume and weir equations.
- Selection of 5 level units and 15 flow units.
- Selection of baud rate and up to 128 slave IDs for the RS232 and RS485 serial communication ports.
- Selection of the output response time.
- Programming of relay assignments.
- Programming of data logger channels and logging intervals.
- Selection of information to be displayed on the 4 line 2 page main display screen.

Features:

- **Fast and Simple Programming**
- **Single or Dual Sensor Operation**
- **Three Sensor Options**
- **High Accuracy and Reliability**
- **Internal Data Logger**
- **18 Month Warranty**

eastech
FLOW CONTROLS



Vantage 2220 General Specifications:

Enclosure:

Standard: Nema 4X polycarbonate
 Optional: Nonincendive Class I&II, Grps. A-D Div.2
 Explosion proof, Aluminum, Class I, Grps. C & D, Class II, Grps. E,F,G Div. 1 & 2

Accessories Heater and thermostat, Door Lock, Modem at 14400 baud rate

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

Electronics:

Outputs:
 4-20mAADC Dual analog isolated into 800 ohms maximum, monitored to detect open circuits. RFI and gas discharge surge protection and two fuses per channel.

Relay Alarms Up to 5 optional relays. SPDT relays (plug-in). Rated at 0.25A @ 120VAC or 0.5A @ 24VDC

Serial Ports: 1200-38400 Baud, Slave IDs 1 to 128
 RS232 Modbus™ RTU Protocol.
 RS485 Optically isolated, Modbus™ RTU Protocol.

DC Power Out 12VDC. 100mA maximum

Display: 4 line, 20 character backlit LCD
 16 button programming keypad

Power: 90 to 240 VAC, 50/60 Hz
 12 to 28 VDC @ 250mA
 12 watts std. W/heater 22 watts

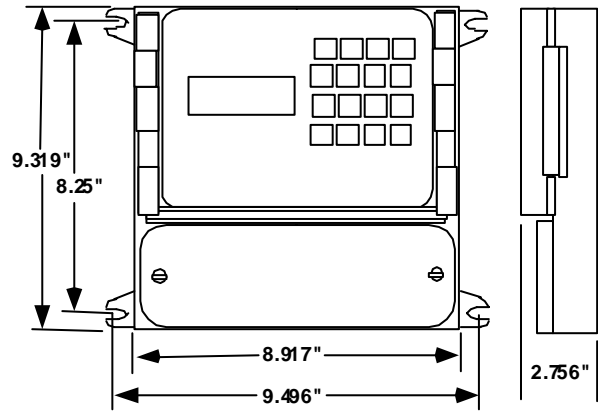
Power Supply High immunity: Approvals CE, UL, CSA

Data Logger: Programmable 8 channel with storage of up to 32768 records in non-volatile flash memory. Programmable logging intervals of 1, 5, 10, 15, 30 or 60 minutes.

Daily Summary Daily summary of the total flows for the past 8 days are viewable from the display through menu selection.

Accuracy: With FB5/FB7 sensors: .02" or 0.05% of target distance, whichever is greater.

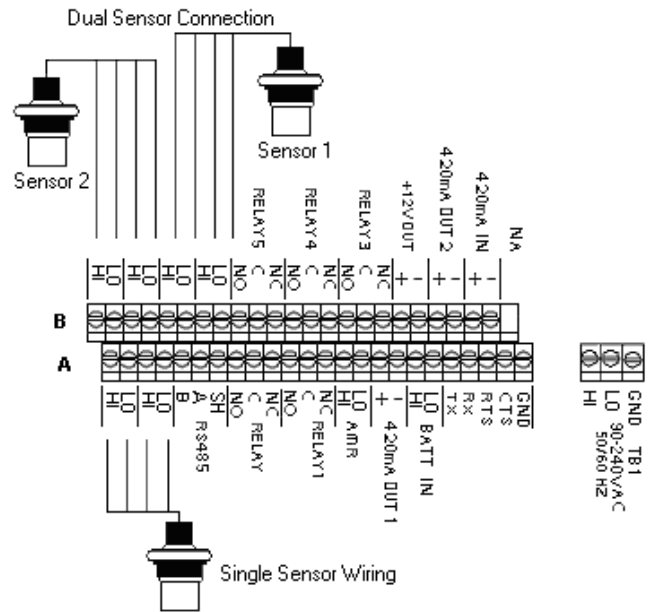
With FB3 sensor: 0.1" or 0.1% of target distance, whichever is greater.



Enclosure Dimensions

Flw1	1000	GPM
Flw2	20	GPM
Totl 1	123456 X1000	GAL
Totl 2	123456 X1000	GAL

Backlit Display



2220 Wiring Diagram

