Ultrasonic Open Channel Flow Meter

Product introduction:
Ultrasonic Open Channel Flowmeter is a high precision flow measurement instrument, which use Transit Time Ultrasound principle to measure the flow in a variety of Flumes, Weirs or Troughs.

Working Principle:
The sensor is a transceiver which emits high frequency sound, which hits the medium surface and returns back to the sensor receiver. The time of travel of the ultrasound is inversely proportional to the height of the flowing medium. This way the height of the flowing medium is calculated. And with the algorithms programmed the Height, Flowrate and Total Flow are calculated and displayed.

Features:
Built-in variety of algorithms, suitable for a variety of standard weirs.
Stable sensors - Suitable for harsh industrial situations
Isolated 4~20mA current output. Optional spot bus interface.
Programmable Relay Output.
Built in temperature sensor. Real-time automatic temperature compensation.
The blind zone can be manually set, shielding the probe near the interference signal. Calibrated at Factory. And if required we shall do calibration at site.
Applications:
Measurement of water flow in Rivers, Canals, Drains, etc.

Flow Totalizer parameters:
Flow measuring range: Depends on the size of the flume.
Maximum Count: 9999999999
Types of suitable weirs: Triangular weir, rectangular weir, Parshall flume, etc.
Display accuracy: 1 count. Overall accuracy depends on the input signal. Different Weirs / flumes has different accuracies. A triangular weir has 1 to 2% flow error, a rectangular weir has 1 to 4% accuracy, a Parshall flume has 3% flow error, etc.
Display: 2.8-inch LCD. Displays Height, Flowrate, Total Flow, etc.

Output:
Voltage output: DC 12V or 24V
Signal output: RS485/RS232; 4~20mA; 2 channel relay

Physical performance:
Size: 185*256*60mm
Material: Cast aluminum, weight: 2kg

Environmental performance:
Operating temperature: 0–50°C
Relative humidity: ≤ 85RH
Pressure: Atmospheric pressure

Data storage: Can store 168 files

Optional:
Port for Mini printer, which can work with 12VDC