

PDS-360 ULTRASONIC OPEN-CHANNEL FLOWMETER



The PDS-360 Ultrasonic Open-Channel Flowmeter is a highly accurate, non-contacting liquid flow measuring device. The system monitors flows non-intrusively through any standard primary flow device using sophisticated ultrasonic ECHO ranging techniques. The sensor is supported above the liquid flow surface in the primary device and is microprocessor controlled providing accurate, instantaneous flow rates with totalized volume flow and proportional analog flow rate signals (4-20 mA).

The PDS-360 system includes an extensive timestamped data logging with a 200 day, 24 hour flow summary report providing date, time, min, max and

average GPM flows with daily totals. The 200 daily flow totals can be viewed at the flowmeter or printed directly to a serial printer. All datalog, including the 24 hour summary, time stamped average flow rate and time stamped Event list can be downloaded to a PC or laptop directly or by MODEM using the RS-232 output. Any standard communication software package such as Microsofts Hyper Terminal may be used to receive the data and save it to file. No need to purchase and learn new software. The PDS-360 also provides one (1) programmable pulse output for a Sampler or remote counter, four (4) control relays and two (2) 4-20mA outputs. Model PDS-360DX system has the same features less Relay Outputs, RS-232 Output and Data Logging

Precise flow depth measurements are continuously made under processor control. Ultrasonic sound pulses are transmitted from the sensor and elapsed time of echo return is accurately measured. This information is converted to a depth-of-flow and is applied to the respective equation for the primary flow device selected. The built-in equations or user defined equation produce a flow rate in PERCENT of scale, GPM, MGD, DEPTH in inches or feet along with temperature indication, totalized flow volume and data logging.







The Ultrasonic Pulse transmitted by the Sensor will reflect off the water surface and return to the Sensor. The time delay from transmit to receiving the ECHO is an indication of the distance of the liquid surface from the Sensor. This distance is subtracted from the 0% flow level (crest) programmed by the user to determine the depth of flow.



ELECTRONICS ENCLOSURE

SENSOR