

QCS-80I & QCS-300IB

Ultrasonic Flow Meters

Our QCS flow meters are your best choice! The QCS-300IB open channel and QCS-80I closed pipe ultrasonic, programmable flow meters offer **accuracy, flexibility, reliability, easy setup, easy operation, and low acquisition and ongoing maintenance costs.** And no special software is required.

The QCS-300IB ultrasonic open-channel flow meter is a highly accurate, non-contacting liquid flow measuring device. The system monitors flows non-intrusively through any standard primary flow device using sophisticated ECHO ranging techniques. The sensor is supported above the liquid flow surface in the primary device and is microprocessor controlled to provide accurate, instantaneous flow rates with totalized volume flow and proportional analog flow rate signals (4 to 20 mA).



QCS-80I and Honeywell Recorder

Applications
Sewage Treatment Plants
Wet Well Pump Stations
Waste Activated Sludge
Valve Positioning
Industrial Processes
Belt Press Feeds

The QCS-80I ultrasonic Doppler flow meter is a highly accurate, non-contacting liquid flow measuring device. The system non-intrusively monitors flows through most standard pipes. The Sensor straps to the outside of the pipe and is microprocessor controlled to provide instantaneous flow rates along with totalized flow and proportional analog output flow rate signals (4 to 20 mA). The Honeywell recorder shown here is used to house both the 80IA and the 300IAB.

Please be sure to pair our QCS flow meters with our patented and proven *QCEC-VAC* automatic samplers. And remember, Quality Control Equipment Company is focused on delivering value and industry leading customer service. Great technology, the best value, and outstanding customer service.....

QCS-300IB
Applications
Sewage Treatment Plants
Industrial Discharges
Municipal Sewers
Residential Developments
Storm Sewer Runoff
Agricultural Runoff

SIMPLY YOUR BEST CHOICE!

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Quality Control Equipment Company

QCS Flow Meter Specifications

	QCS-80I & QCS-80IA	QCS-300IB & QCS-300IAB
Electronics		
Power Requirement	115/220 VAC ± 15%, 50/60 Hz, 12-24 VDC @ 15 W max.	115/220 VAC ± 15%, 50/60 Hz, 12-24 VDC @ 15 W max.
Dimensions (H x W x D)	80I = 12 in. x 7.25 in. x 7 in. 80IA = 14 in. x 14 in. x 5.8 in.	300IB = 12 in. x 7.25 in. x 7 in. 300IAB = 14 in. x 14 in. x 5.8 in.
Weight	80I = 8 lb. 80IA = 12 lb.	300IB = 10 lb. 300IAB = 14 lb.
Temperature	25°F to 125°F (-5° F with optional heater)	25°F to 125°F (-5° F with optional heater)
Display	2 line x 20 character, alphanumeric, LCD with LED backlighting	2 line x 20 character, alphanumeric, LCD with LED backlighting
Totalizer (counter)	8-digit accumulative with programmable multiplier of x1, x10, x100, x1000. 30 daily, 8 digit totalizers, data logging	8-digit accumulative with programmable multiplier of x1, x10, x100, x1000. 200 daily, time stamped 8 digit totalizers, data logging
Outputs	0-10 VDC adjustable, 4 to 20 mA isolated into 1000 ohm max. RS-232, 4 relay outputs, 2 alarm set-points and 2 programmable pulse (250 ms duration), SPDT 7 A/250 VAC	2 independent 4 to 20 mA isolated into 1000 ohm max. RS-232, 4 relay outputs, 1 programmable pulse (250 ms duration), SPDT 5 A/250 VAC
Flow Range	.5 ft./sec. to 25 ft./sec. (not recommend for flow rates < 1 FPS)	
Span Range		0-1 in. to 0-150 in. full scale
Dead Band (blanking)		Automatic/dynamic 10 in. to 150 in.
Sensitivity (application dependent)	Minimum 75 ppm suspended solids and/or gas (air) bubbles @ 1.0 ft./sec.	
Accuracy (received signal is application dependent and field conditions can impact)	±0.5% of received signal	±0.5% of range or better (calculated error < ± .04%)
Resolution	0.01 ft./sec., 0.01 gal./min.	0.01 in., 0.01 gal./min.
Memory	Memory and non-volatile RAM	Memory and non-volatile RAM
Data Log	30 day flow summary including: date, daily average GPM, total pump run time, total # pump cycles, and total gallons pumped; 14 day flow summary including: date, cycle number, start/run time, average GPM pumped, and total pumped for each cycle	200 day flow summary including: min., max., and avg. GPM and total gallons. Time stamped avg. GPM flow rate with programmable log rate of 0 to 99 minutes in 1 minute increments; time stamped EVENT to list to record flowmeter actions
Download	Directly to serial printer, PC/laptop, or modem. Initiate from PC or from flow meter. Preformatted data.	Directly to serial printer, PC/laptop, or modem. Initiate from PC or from flow meter. Preformatted data.
Flow Equation		Parshall, Palmer/Bowlus, Leopold-Lagco, Rectangular Weirs with and w/o end contractions, V-Notch Weirs, user defined
Sensor		
Exposed Material	PVC	PVC
Beam Pattern		5° conical (2.5° from centerline)
Temperature	-40° F to 160° F	-40° F to 160° F
Cable	Coaxial, 20 feet flexible seal conduit, 0.6 in. OD, max. 50 ft.	25 ft. corrosion resistant, 4 connector shielded, Belden #8723, max. 40 V pulse applied, 1500 ft. max.
Dimensions	1.5 in. W x 2 in. L x 1 in. H (sensor head only)	2.95 in. diameter x 2.5 in. length
Mounting (material)	1in. to 72 in. pipe with supplied couplant paste (steel, PVC, FRP and cast)	PVC angle bracket
Temperature probe		Built into sensor head, ±2° F in 1 degree increments

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