Flow&Level Measurement

Open Chanel Flowmeter

QTFM Series

Overview

The QTFM series is a remote version ultrasonic open channel flow meters (O.C.M.). It consists of two elements, a wall mounted host, which has a display and an integral keypad for programming, and a probe, which must be mounted directly above the surface to be monitored. Both of the host and the probe are plastic leak-proof structure.

The QTFM series OCM can be widely applied to the environmental protection, water treatment, irrigation, chemical, and other industries.

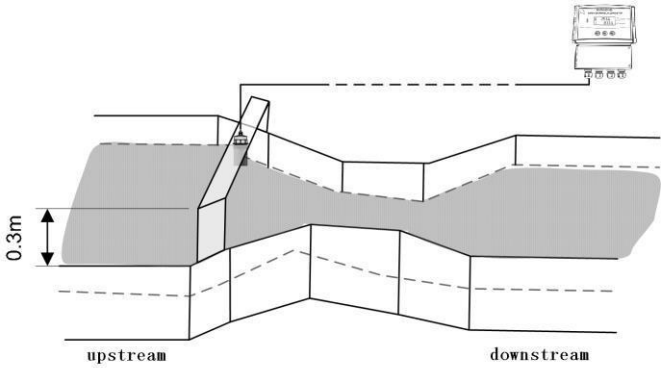
Benefits

- High detection accuracy, the flow meter measurement changes with 1mm, the accuracy of change in level is 1 mm;
- Suitable for a variety of weirs and flumes, Parshall flumes (ISO), Right-angle triangle weir, Rectangular weir;
- Displays flow rate in L/S or M3/h;
- Excellent anti-interference capability;
- Clear display with enhanced 14 digit two line backlit LCD;
- The cable length between probe and host up to 1000m;
- The probe with leak-proof structure and IP68 protect grade;
- Chemically resistant probe materials for maximum application flexibility;
- Provided 4-20mA output and RS485 serial communication (MODBUS-RTU) output;
- Provided programmable 6 relays at most for alarms, and The pulse output for cumulative flow rate.
- Three button for programming or remote control for easy configuration and operation（opt.）;

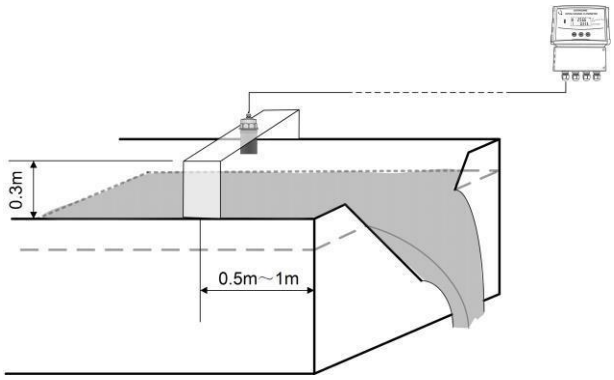
Technical Specifications

Host Technical Specification	
● Weir&Flume Match:	Parshall Flume、 Triangular Weir 、Rectangular Weir (Chinese Standard / ISO Standard)
● Level Resolution:	1mm
● Mode of Indication:	14 Digit LCD in 2 rows with backlight
● Parameter set up:	3 induction buttons
● Instantaneous flow range	0.0000~99999L/S or m^3/h
● Cumulative flow display maximum range	99,999,999.9m^3/h
● Communication Protocol:	RS485 MODBUS-RTU
● Output Current:	DC4~20mA (Corresponding to instantaneous flow)
● Output Load:	0~500Ω
● Relay Output:	Upper/lower limit alarm and control (instantaneous flow or water level) Accumulated flow pulse output Can be set to high, low or fault alarm
● Relay Mode:	Normal Open/Normal Close (tunable)
● Relay Type:	5A 250VAC/30VDC
● Relay No.	Up to 6
● Power Supply:	DC24V(±5%) 0.2A AC220V(±20%) ,0.1A
● Measure Cycle:	1.0second(tunable)
● Temperature compensation:	The whole range is automatic
● Temperature Range:	-40 °C ~70 °C
● Cable Fix:	PG13.5/PG11/PG9
● Crust Material:	ABS
● Protect Grade:	IP67
● Mode Installation:	Wall installation

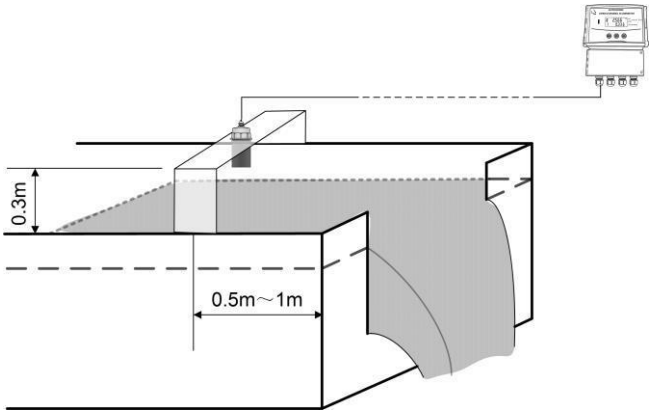
The Probe Technical Specification	
● Measuring range	0.00~4.00m(Level)
● Dead Zone	0.20m
● Beam Angle:	8°(3db)
● Temperature Range:	-40 °C ~+75 °C
● Sensor Material:	ABS/PVC/PTFE
● Protect Grade:	IP68
● Corrosion resistance	Resistant to strong corrosion
● Probe Cable Length	10m(can be extended to 1000m by order)
● Installation in cold regions	Probe lengthened or choose electric heating
● Mode Installation:	Whorl /Flange/Frame



Parshall flume



triangular weir



rectangular weir

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■Ordering Table

QTFM	POWER				
	A	AC220V			
	D	DC24V			
	O	OTHERS			
		OUTPUT			
		1	4-20mA		
		2	RS485-MODBUS		
		3	4-20mA & RS485-MODBUS		
			RELAYS OUTPUT		
			R0	Without relay	
			RX	X means the no. of relays, 6 at most	
				SENSOR MATERIAL	
				A	ABS&PVC
				P	PTFE
QTFM					