



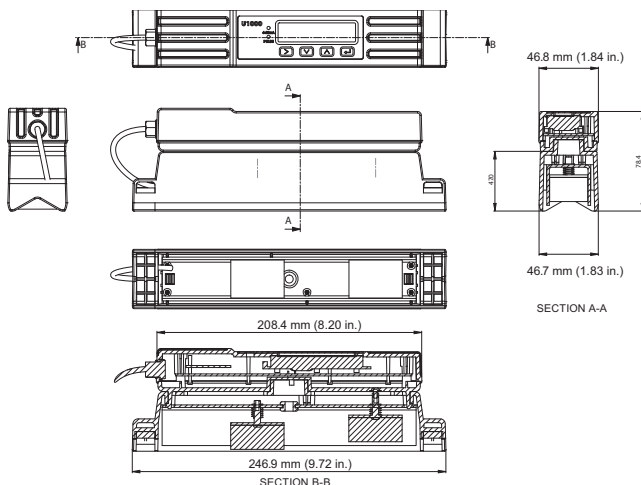
The U1000 is an ultrasonic permanent/fixed clamp-on flow metering solution for measuring flow rate. The cost effective device can either be used as a stand alone meter or as an integral part of a control loop.

The U1000 is very simple to install - clamp it on to the pipe, connect it to power and enter the pipe diameter. No special skills or tools are required.

The clamp-on design allows the installation in running systems without opening the pipe, providing minimum downtime and maximum availability.

Compact, rugged and reliable, the U1000 has been designed to provide sustained performance in industrial environments.

Dimensions



Features

- Large, easy to read graphic display with backlighting
- Easy to install without special tools
- Clamp-on sensors for dry servicing
- Simple to follow programming menu
- Simple 'Quick Start' set up procedure
- Compact integral design



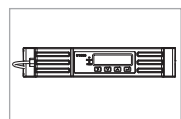
Applications

- Ultrapure water measurement
- Flow measurement for heat metering
- Chilled water metering and flow measurement
- Flow measurement for chilled water energy metering
- Process water metering and flow measurement

Specifications

General			
DSP Measurement Technique		Transit time	
Flow Velocity Range		0.1 m/s - 10 m/s; bi-directional	
Accuracy		±3 % of flow reading for flow rate >0.3 m/s	
Repeatability		±0.5 % of measured value	
Response Time		< 500 ms	
Selectable Flow Units		Velocity	m/s, ft/s
		Volume	l/s, l/min, gal/s, gal/min, USgal/s, USgal/min, m³/min, m³/h
Selectable Total Volume Units		liters, m³, gallons, US gallons	
Menu Languages		EN	
Environmental			
Operating Temperature		0 °C to 50 °C	-32 °F to 122 °F
Storage Temperature		-10 °C to 60 °C	-14 °F to 140 °F
Pipe Wall Temperature		0 °C to 85 °C	-32 °F to 185 °F
Operating Humidity		Max. 90% relative humidity @ 50 °C (122 °F)	
Applicable Pipe Types			
Pipe Materials		PVDF-SYGEF, PP-PROGEF, PE-ELGEF, PB-INSTAFLEX, ABS, PVC-U/PVC-C, Mild Steel, Ductile Iron, Stainless Steel 316	
Pipe Dimension (OD)		25 - 115 mm	1 - 4.5 inch
Electrical			
Supply Voltage		12 to 24 V AC or DC	
Power Consumption		Max. 7 VA	
Outputs			
Analog Output	Range	4 to 20 mA	
	Resolution	0.1 % of full scale	
	Load max.	620 Ω	
	Isolation	1500 V Opto-isolated	
	Alarm Current	3.5 mA	
Pulse Output	Type	Digital MOSFET relay, voltage free NO contact	
	Pulse Repetition	1 - 166 pps user programmable, Frequency mode max. 200 Hz	
	Pulse width	25 ms default value, 3 - 99 ms user programmable	
	Voltage max.	48 V AC	
	Current max.	500 mA	
	Isolation	2500 V opto isolated	
Enclosure and Display			
Material		Polycarbonate	
Dimensions		250 x 48 x 90 mm	9.85 x 1.9 x 3.55 inch
Weight		0.5 kg	1.1 lb
Keypad		4 key tactile feedback membrane keypad	
Display	Type	2 line x 16 characters	
	Viewing Angle	Min. 30°, Max. 40°	
	Active Area	83 x 18.6 mm	3.3 x 0.73 inch
IP Rating		IP 54	
Shipping Information			
Box Dimensions		290 x 280 x 100 mm	11.4 x 11 x 4 inch
Weight		1.4 kg	0.05 lb
Volumetric Weight		1.4 kg	0.05 lb
Standards and Approvals			
	CE, RoHS compliant		
	Safety	BS EN 61010-1:2001	
	EMC	BS EN 61326-1:2006	BS EN 61326-2-3:2006
	Environmental	BS EN 60068-1:1995	
		BS EN 60068-2-1:2007	BS EN 60068-2-2:2007

Ordering Information



Mfr. Part No.	Code	Description	USD
U1000-1	159 300 085	U1000, for plastic and steel pipe d25 - d115 mm	1,858.00