



LABTECH
ELECTRONICS PVT. LTD.

PRECISION IN EVERY PROCESS

WATER MEASUREMENT SOLUTIONS

SMART ULTRASONIC WATER METERS

Track every drop. Make informed water decisions.



INLINE METERS

Dedicated water metering

CLAMP-ON

External pipe measurement

CONNECTED DATA

Interfaces by model

Utilities / Industry / Irrigation / Water treatment

CHOOSE YOUR MEASUREMENT APPROACH

A meter for every water task

Select by installation method, pipe size, water quality and the data you need.

Model	Installation / purpose	Published size range
ULTRAFLOW 500L	Inline water meter	DN15-DN40
ULTRAFLOW 1000	Compact wafer water meter	DN50-DN150*
ULTRAFLOW 500LP / 500HP	Inline family; channel options	DN15-DN800*
ULTRAFLOW 500HPA	Inline flow / heat measurement	DN15-DN1000
PICOFLOW 1000	Integrated clamp-on	DN15-DN40
ULTRAFLOW 5000	Wall mounted; clamp-on / insertion	DN25-DN1200*
ULTRAFLOW 7000	Wall mounted; sensor options	DN15-DN6000*
ULTRAFLOW 3000 / 4000	Portable flow surveys	4000: DN25-DN1200
ULTRAFLOW 6000 / 8000	Open-channel / Doppler	Select by channel geometry

*Ranges depend on sensor or body selection. ULTRAFLOW 1000 flow tables list DN50-DN150; dimension tables cover DN50-DN100. ULTRAFLOW 5000 filename and internal range differ: confirm the required sensor size. The 500LP / 500HP source describes the family without assigning each configuration to one suffix.



INLINE WATER METERING

ULTRAFLOW 500L

Compact ultrasonic water metering for distribution, irrigation and industrial consumption monitoring.

Features that support daily use

- No moving measuring parts.
- Low starting flow and wide range ratio.
- Forward and reverse flow measurement.
- Instantaneous and cumulative flow display.
- 24-month data storage.
- RS485 / Modbus; other interfaces by option.
- IP68 protection and lithium battery operation.



Specification	ULTRAFLOW 500L
Nominal size	DN15, DN20, DN25, DN32, DN40
Accuracy / ratio	Class 2; R400 / R250 by configuration
Q3 (m3/h), by size	2.5 / 4.0 / 6.3 / 10 / 16
Maximum working pressure	1.6 MPa
Power / options	3.6 V lithium; external supply available

Customer benefit: monitor consumption and compare usage over time to support water management. Battery life and LoRaWAN, M-Bus, pulse and temperature options depend on the ordered configuration.



UTILITY AND INDUSTRIAL INLINE METERS

ULTRAFLOW inline family

Compact wafer and multi-channel designs for dedicated water measurement.



ULTRAFLOW 1000

- Approximately 50 mm thick wafer body.
- Nylon / polycarbonate construction.
- RS485; Wi-Fi is optional.
- Velocity range: 0.05-7 m/s.
- IP68; battery or external power.



ULTRAFLOW 500LP / 500HP

- Small threaded and larger flanged bodies.
- Single, two or four-channel options.
- IP68 protection.
- RS485; M-Bus / NB-IoT options.
- Body material and power options.

Customer benefit: choose a body and channel configuration suited to your line size, access and monitoring requirements. The 500LP / 500HP datasheet describes a shared family; confirm the exact suffix, temperature rating and configuration with LABTECH.



HIGH-PERFORMANCE INLINE MEASUREMENT

ULTRAFLOW 500HPA

Ultrasonic flow measurement with optional heat measurement for process and water systems.

- No rotating or moving measuring parts.
- IP68 sealed instrument design.
- Accuracy options: 0.5% or 1%.
- RS485 communication.
- 4-20 mA, OCT pulse and relay outputs.
- Heat measurement with PT100 sensors.



Configuration	Published range
Small inline body	DN15-DN32; threaded or flanged
Standard inline body	DN40-DN1000
Fluid temperature	-30 to +160 deg C
Pressure	Depends on body size and configuration
Inputs	Three 4-20 mA analogue inputs

Customer benefit: combine flow and temperature measurements to evaluate thermal energy use where the heat-meter option is specified. Confirm pressure, body material, sensor accuracy and connection standard before ordering.



EXTERNAL PIPE MEASUREMENT

Clamp-on solutions

Measure suitable liquid flow from outside the pipe, without introducing an inline obstruction.



PICOFLOW 1000

- DN15-DN40; integrated clamp design.
- Metal and rigid plastic pipe applications.
- LCD; 4-20 mA and Modbus RS485.
- IP65 enclosure; 10-24 VDC supply.
- Accuracy: +/-2%; +/-1% after calibration.
- Optional energy / BTU measurement.



ULTRAFLOW 5000

- Wall-mounted transit-time instrument.
- Accuracy: +/-1% of measured value.
- IP65 transmitter; IP68 transducers.
- Positive, negative and net totalisation.
- RS232 / RS485 Modbus and outputs.
- Optional SD storage and energy function.

Customer benefit: retrofit monitoring with less interruption. Clamp-on sensor selection requires the pipe material, outside diameter, wall thickness and fluid details. Install on a full pipe with suitable straight lengths and acoustic coupling.

PERMANENT ONLINE MONITORING

ULTRAFLOW 7000

One wall-mounted transmitter with clamp-on, insertion or inline sensor choices.

- Transit-time measurement; accuracy +/-1%.
- Published system range: DN15-DN6000.
- IP65 transmitter; IP65 / IP68 sensors.
- 4-20 mA, OCT pulse and relay outputs.
- RS485 Modbus; HART optional.
- Heat measurement with temperature sensors.



Sensor configuration	Published pipe range
Small / medium clamp-on	DN25-DN100 / DN50-DN700
Large clamp-on	DN300-DN6000
Insertion	DN80-DN6000
Small / standard pipe body	DN15-DN32 / DN40-DN1000
Standard fluid temperature	-30 to +90 deg C; higher option available

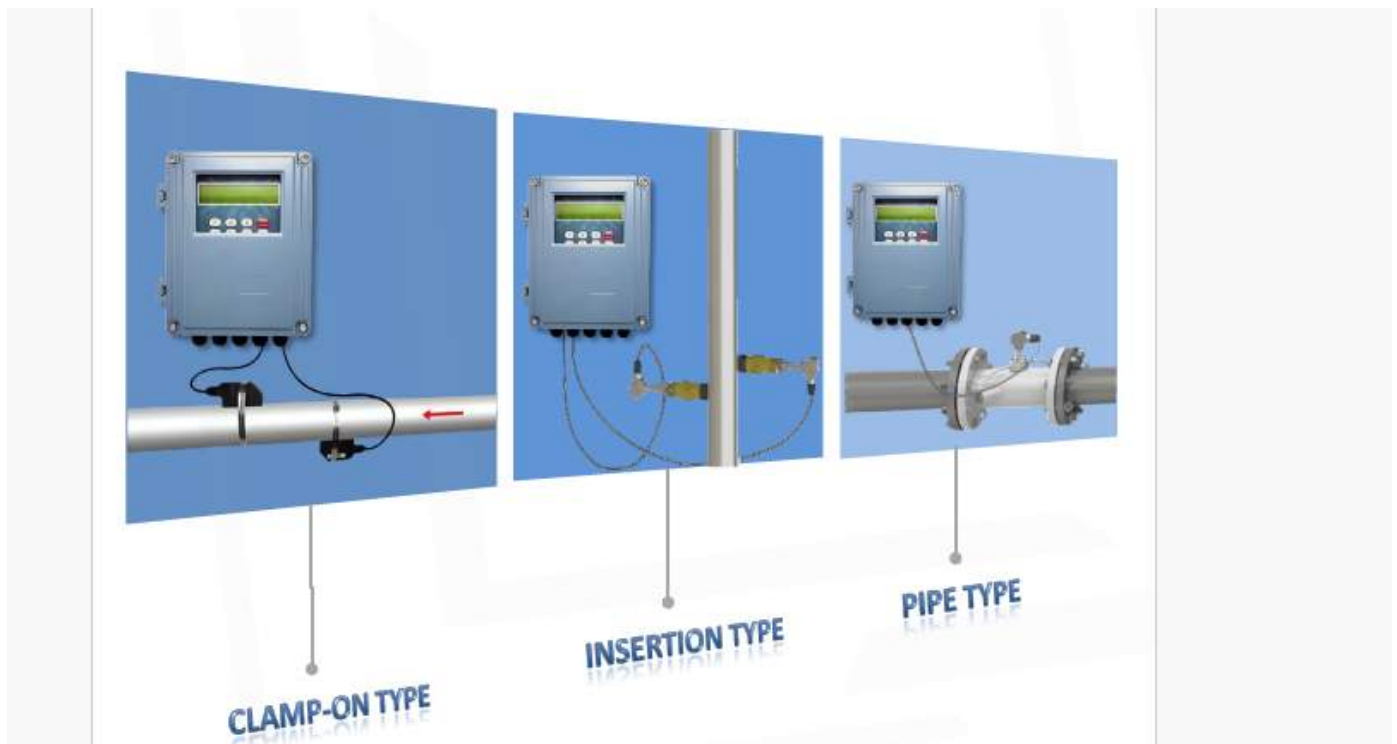
Customer benefit: match the sensor arrangement to the installation. Clamp-on sensors avoid pipe penetration; insertion and inline versions require process connections. Size and temperature limits are sensor-specific.



INSTALLATION OPTIONS

ULTRAFLOW 7000 connections

Choose the sensor connection method to suit the pipeline and site conditions.



CLAMP-ON

External sensors are clamped to the pipe. No pipe penetration; verify pipe material, wall thickness and acoustic coupling.

INSERTION

Sensors enter the pipe through process fittings. Confirm line size, pressure, access and the approved installation procedure.

PIPE TYPE

An inline sensor body is fitted between the pipe connections. Match the body size, flange standard and pressure rating.

Sensor ranges and temperature ratings differ by connection type. Final selection, installation and commissioning must suit the actual site conditions.



PORTABLE VERIFICATION

Take measurement to the site

Portable instruments for spot checks, flow surveys and performance assessment.



ULTRAFLOW 3000

- Handheld clamp-on ultrasonic meter.
- Non-contacting transducers.
- Built-in data logger and totalisers.
- Published repeatability: 0.2%.
- V-method and Z-method installation.



ULTRAFLOW 4000

- Portable transit-time flow meter.
- DN25-DN1200 clamp-on range.
- Accuracy: +/-1% of measured value.
- 4-20 mA and RS485 Modbus.
- 16 GB SD storage; rechargeable battery.
- Optional BTU with PT1000 sensor pair.

Customer benefit: verify installed meter readings and assess pumps, valves or cooling-water circuits across multiple locations. Plan each survey around full-pipe conditions, sensor temperature limits and the required logging interval.



WATER BEYOND CLOSED PIPES

Open-channel measurement

Two different measurement approaches for treatment, irrigation and hydrological applications.



ULTRAFLOW 6000

- Non-contact level sensor above water.
- Flow calculation using a weir or flume.
- Parshall, triangular and rectangular types.
- Level resolution: 1 mm.
- Standard probe: 0-4 m; dead zone 0.20 m.
- RS485 Modbus RTU and 4-20 mA.
- IP67 host; IP68 probe.

ULTRAFLOW 8000

- Portable submerged Doppler sensor.
- Measures velocity, depth and temperature.
- Velocity range: 0.02-5.00 m/s.
- Depth measurement: 0.05-10 m.
- RS485 Modbus communication.
- Rechargeable battery operation.
- For suitable channels and sewer flows.

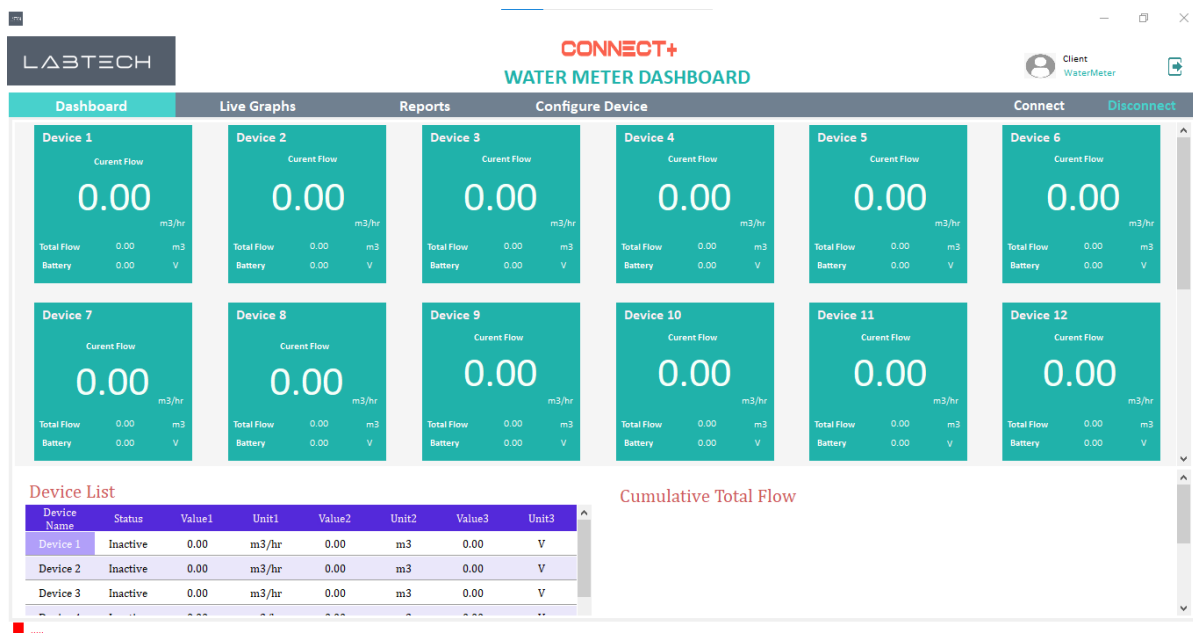
Customer benefit: quantify discharge or channel flow using the method suited to the site. ULTRAFLOW 6000 needs a defined weir or flume relationship. ULTRAFLOW 8000 needs suitable scatterers and a representative submerged sensor position; the source recommends working water depth above 15 cm.



CONNECT MEASUREMENT TO DECISIONS

Water data that works for you

Use model-supported outputs and the appropriate gateway to bring field measurements into your monitoring system.



CONNECT+ monitoring platform

- Track live readings and compare consumption trends.
- Use records and reports to support maintenance and water audits.
- Select RS485 / Modbus or other supported interfaces by model.
- Specify compatible gateways, power, software and communication options with LABTECH.

Specify your application

Share pipe size and material, flow range, water quality, pressure, temperature, installation method, power and communication needs.

sales@labtech.co.in | www.labtech.co.in

Labtech Electronics Private Limited, Chennai, India

SELECTION AND INSTALLATION

Plan for a reliable measurement

Good measurement starts with the right instrument, site and configuration.

Confirm before selection	Why it matters
Minimum / normal / maximum flow	Match the meter range to the operating profile.
Pipe DN, outside diameter, thickness	Select the correct inline body or clamp-on sensor.
Water quality and air content	Check the suitability of transit-time or Doppler measurement.
Pressure and temperature	Verify the selected body and sensor ratings.
Full pipe / channel geometry	Confirm the installation conditions for the measurement method.
Power, outputs and communication	Match the meter to the PLC, logger, gateway or platform.
Maintenance and access	Allow space for display viewing, service and cables.

About this catalogue

Prepared from LABTECH product datasheets supplied for this catalogue. Product photographs come from the supplied material; the first-page installation is an illustrative generated scene. Features and options vary by ordered configuration. Where source documents contain differing values or unclear model assignments, confirm the final specification with LABTECH.

Labtech Electronics Private Limited
1/3, Kundrathur High Road, Periyapanicheri
Chennai - 600128, Tamil Nadu, India
sales@labtech.co.in | www.labtech.co.in
Telephone: 044-48605048



CLIENT SUPPORT

Precision in every process

Application guidance / Commissioning support / Service assistance

From selecting the right instrument to keeping your water system running, LABTECH stands beside you.

Labtech Electronics Private Limited
1/3, Porur-Kundrathur High Road, Periyapanicheri
Chennai - 600128, Tamil Nadu, India
sales@labtech.co.in | service@labtech.co.in
www.labtech.co.in | Telephone: +91-44-48605048

CALIBRATION & PERFORMANCE DISCLAIMER

Every instrument is supplied with a factory calibration certificate documenting verification of its specified accuracy or switching performance against the agreed specifications and applicable standards.

Published accuracy refers to defined test conditions and the selected configuration. Actual operation, performance and measurement accuracy depend on site conditions, installation, media characteristics, ambient and process conditions, and proper commissioning and maintenance.

Images are representative; installation scenes are illustrative. Specifications are subject to configuration and continuous improvement.