



Verify flow rate anywhere, anytime.



Badger Meter

## DXN Portable Clamp-On Ultrasonic Flow Meter

## Troubleshoot Flow Performance

Designed for systems engineers to quickly troubleshoot problems and verify performance during system commissioning and diagnostics, the Dynasonics® DXN portable clamp-on ultrasonic meter by Badger Meter is the perfect tool for any jobsite. Easy to install by clamping onto the outside of the pipe, the DXN measures flow using non-invasive ultrasonic sensors. Its portability makes it an excellent choice for measuring flows throughout the plumbing infrastructure to verify sensor, pump and valve performance.

With rapid response times, hybrid transit time and Doppler modes, the DXN captures more than 50 flow readings per second. Measurements are retained to memory stored in user-defined files and USB connectivity is included for easy downloads. With the only seven-inch, full-color advanced touchscreen interface in the industry, full-color graphing and wizard-based start-up configuration, the DXN is an excellent choice for easy programming and readability. Technicians can store site parameters using plain text and recall settings when they return for maintenance and diagnostic work in just a few touches. The compact design fits the meter and accessories into one convenient over-the-shoulder bag for easy portability. Applications include clean, solids-bearing or aerated liquids in closed full pipes 1/2 inch (12 mm) and larger.

## Energy Monitoring

In addition to measuring liquid flow rate, the DXN is ideal for calculating hydronic energy usage. The built-in hydronic energy calculator makes it easy to facilitate energy studies on heating and cooling loops in building automation systems or in process applications. The DXN is equipped with heat flow capabilities designed to measure the rate and quantity of heat delivered or removed from devices such as heat exchangers. The DXN measures the volumetric flow rate of the heat exchanger liquid, the temperature at the inlet pipe and the temperature at the outlet pipe. Heat flow measurement can be delivered in Btu, Watts, Joules, Kilowatts, and others.

### Applications

- Water
- Wastewater
- HVAC/Energy Monitoring
- Power Generation
- Mining
- Semiconductor
- Food and Beverage
- Flow System Commissioning and Troubleshooting



## Features at a Glance

### Measurement

- Switches automatically between transit time and Doppler measurement modes, as needed, to select the best measurement technique for the fluid
- Delivers accuracy up to  $\pm 1$  percent with a data sampling rate exceeding 50 flow readings per second
- Measures pipe thickness with optional gauge attachment to ensure accurate flow measurement

### Operation

- Provides a customizable meter display screen to monitor up to four parameters
- Comes with a full keyboard on-screen control for easy data input
- Handles rigorous environments with an outdoor-readable, full-color display, glove-friendly touchscreen and robust protective cover



### Data

- Stores user-customizable, site-specific parameters and captures data logs for measurement analysis
- Contains 1 GB of internal memory for data logging plus supports USB connectivity for additional storage capacity
- Downloads data easily to a PC via USB connectivity and provides a CSV file easily opened with Microsoft® Excel
- Supports multiple languages including English, Spanish, Portuguese, German, French, Italian, Dutch, Swedish, Norwegian, Russian, and Japanese
- Offers Modbus TCP/IP connectivity

# Complete Portable Liquid Measurement Solution

## Kit Selection

Scalable from a basic model to a full kit, the DXN delivers unprecedented levels of cost-effective, rugged and portable ultrasonic flow measurement. The basic model supports transit time measurement for pipe sizes up to 24 inches (609.6 mm) which is ideal for clean liquids and municipal wastewater applications. The full kit includes a hydronic energy calculator, pipe thickness gauge and has the ability to measure using Doppler technology making it suitable for liquids containing particulates and aeration for pipe diameters up to 120 inches (3048 mm). Five kits are available ranging from basic to full and each can be upgraded to meet changing system needs.

## Kit Options

KIT	TRANSIT TIME TRANSDUCERS			DOPPLER TRANSDUCERS	NON-INVASIVE RTDS	WALL THICKNESS GAUGE	
	SMALL PIPE	STANDARD PIPE	LARGE PIPE				
Basic	✓	✓					Cables, power cord and carrying case
All Transit Time	✓	✓	✓				
Hybrid	✓	✓		✓			
Energy	✓	✓			✓		
Full	✓	✓	✓	✓	✓	✓	



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