

New Ultrasonic Flow Meter USM2000



The USM200 is a high-end ultrasonic clamp-on flow meter built around an imported Intel FPGA chip, giving it the power to process signals extremely quickly and accurately. It measures liquid flow using a combination of two advanced methods: one that tracks the tiny timing of when a signal crosses a threshold, and another that compares the shape of sent and received sound waves, known as the correlation method. By blending these two approaches, the USM200 achieves highly precise measurements that are more stable than other clamp-on ultrasonic flow meters, many of which rely on outdated capacitor-based methods or use only one measurement technique. The device can take over 300 measurements per second, far faster than most competing meters, which may measure fewer than 50 times per second or even just once per second. It is controlled to within 1% accuracy, and it can reliably handle up to five seconds of bubbles or impurities in the pipe without losing measurement stability.

The clamp-on transducers are fully sealed and waterproof with an IP68 rating, using imported sealant. Each pair of transducers is precisely matched within two nanoseconds and can measure all sized pipes from DN25 including wide pipes up to DN1200. Signal cables can reach up to 300 meters, and the innovative hidden clamp design is both practical and visually clean. The USM200 features a four-line backlit LCD for clear readings, a durable membrane keypad, and a sleek enclosure. It supports multiple outputs including 4–20 mA, pulse, relay, and RS232/RS485 Modbus communication, and works across a wide range of temperatures. With its combination of speed, accuracy, robustness, and easy installation, the USM200 provides reliable flow measurement for demanding industrial and commercial applications.

Common industrial and commercial applications include water and wastewater treatment plants, chilled water and hot water systems in HVAC, power plants for cooling water and auxiliary systems, oil and gas facilities for liquid measurement, chemical and petrochemical plants for process monitoring, food and beverage production for clean liquid flow tracking, and general industrial utilities where shutdown-free installation is important.

Call us for more information on the USM200 Ultrasonic Flow Meter.

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