

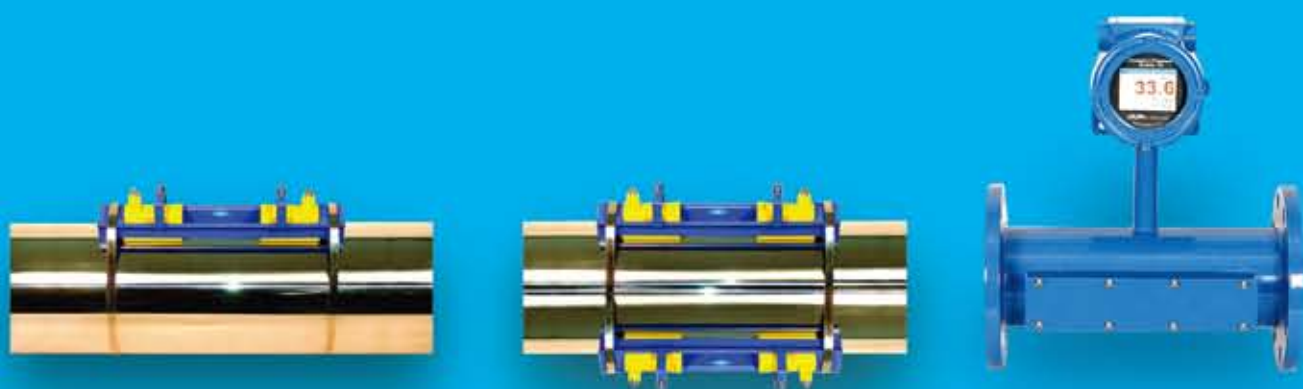
# Xonic<sup>®</sup> 100 Clamp-On Ultrasonic Flowmeter



- Clamp-On Installation
- Accuracy  $\pm 1.0\%$  or  $\pm 0.5\%$  for Dual Path
- No cutting pipe for installation
- Patented Anti-Round Ultrasonic Signal Mode
- New Excellent Products from Korea

**Clamp-On Transducers**  
**Easy Installation**  
**No Cutting Pipe**  
**DSP Technology**  
**Anti-Round Mode Ultrasonic Wave**

**JAIN TECHNOLOGY**







***Jain Technology make new and digitalized ultrasonic flowmeters for liquid and gas flow. Also, Jain Technology has certified calibration laboratory for liquid flow in accordance with the recognized International Standard ISO/IEC 17025 : 2005.***

# Xonic® 100 Ultrasonic Flowmeter



Xonic 100 Ultrasonic Flowmeter

## What is Xonic 100?

Xonic 100 measure transit-time of flow and use DSP (digital signal processing) technology to analyze ultrasonic signals. This DSP technology can remove any noise from pipe and electronics. Also, Xonic 100 use Cross Correlation and FFT (Fast Fourier Transform) technology to make very clean ultrasonic signals.

Measuring pipe is from 20 ~ 6,000mm, and velocity range is from 0.02 ~ 12 m/sec. Xonic 100 can measure very slow flow, so very suitable for block flow (leak) monitoring system. Also, it has two 4-20mA inputs, so user can use this inputs to receive pressure and temperature data without PLC.

## Why use Xonic 100?

Clamp-On Technology make installation very simple. User just attach clamp-on transducers onto pipe. Do not need stop water supply for installation and after service.

In case of pipe change to small or big pipe, user can use existing ultrasonic flowmeter for the new pipe.

Turn-down ratio of Xonic 100 is more than 1000:1. Xonic 100 is best flowmeters to check minimum flow during mid-night. Many case, flow in mid-night down to 1 m<sup>3</sup>/hr for 100mm pipe and Xonic 100 keep accuracy.

Xonic 100 use Cross Correlation technology. So such technology remove most noise from outside, and make Xonic 100 can measure liquids contains heavy air and slurry.

Xonic 100 has large color graphic LCD, and it show flow, total, analog input data (pressure, level, etc), and ultrasonic signal shape, so user can check how flowmeter works in field without oscilloscope as diagnostic functions.

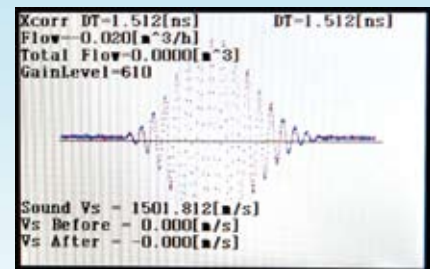
Xonic 100 is dual beam or dual path is basic model. User can use as single channel flowmeter with one pair transducers, and dual channel or dual path flowmeters with two pair transducers.

# The Best Flowmeters To Check Block Flow

## Can measure 0.02 m/sec velocity

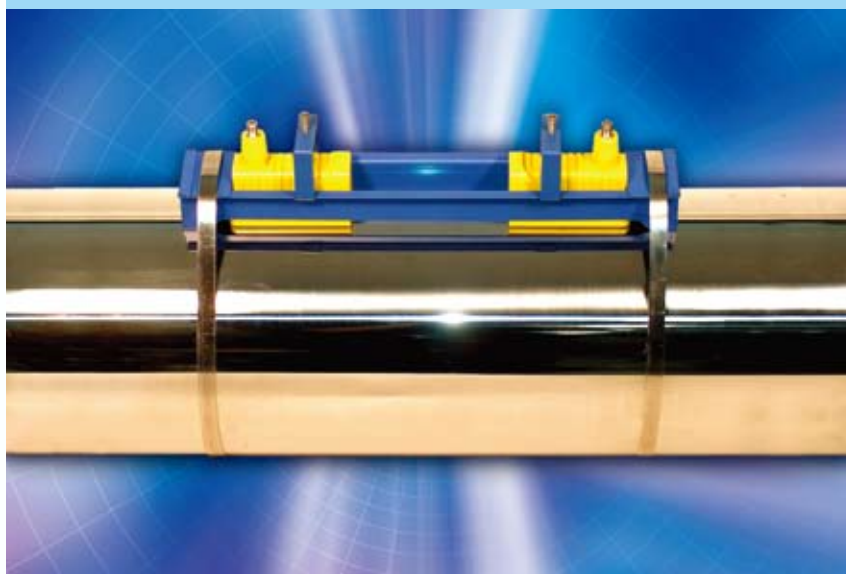
### Performance of Xonic 100

- ✓ Clamp-On Transducers
- ✓ Patented Anti-Round Technology
- ✓ Velocity is from 0.02 to 12 m/sec
- ✓ Measure Water Contains 30% Air and Slurry
- ✓ Oscilloscope Function
- ✓ DSP Technology (Cross Correlation)
- ✓ 12 Patents
- ✓ Two 4-20mA Analog Outputs for Positive & Negative Flow
- ✓ Two Relays for Flow Totalizer
- ✓ Two Analog Inputs for Pressure, Level, and etc.
- ✓ Self-Diagnostic Functions
- ✓ Touch Key Programming
- ✓ Large Color Graphic LCD Display
- ✓ Key Lock Function
- ✓ Software for Easy Installation and Download Data
- ✓ 500,000 Points Datalogging
- ✓ 2 Years Warranty



### Applications

- Municipal Water, Waste Water
- Block Flow Monitoring
- Strong Acid, Solvent
- Milk, Beer, Demi-water
- Oil, Chemicals
- Cool and Hot Water
- Liquids contains Heavy Slurry and Air
- Pulp, Steel Industries
- Nuclear Power Plant
- Sea Water



Clamp-On Transducers are free from contamination and simple installation

# Xonic® 100 Ultrasonic Flowmeter

## Flow Computer and Transducers

Flow Computer



Transducers



Cable and Mounting Track

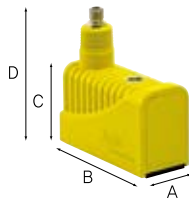
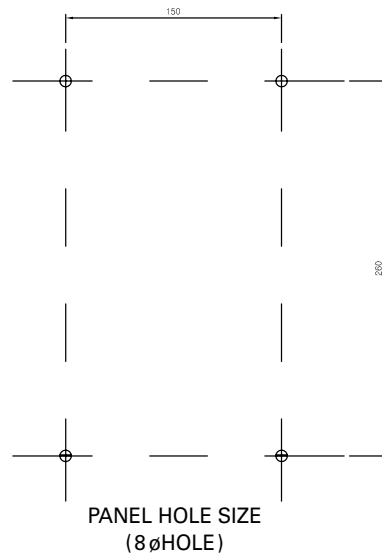
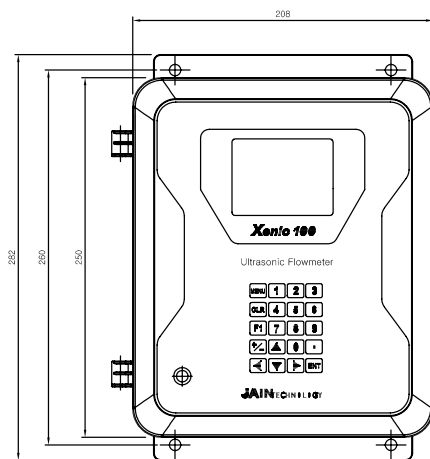


## Specification

Installation	Clamp-On for pipe size:12.7 - 6,000 mm (depend on Transducer)
Principles	AR(Anti-Round) Mode, Transit-Time
Accuracy	± 1.0 % single path (over 0.02 m/s) ± 0.5 % dual path (over 0.02 m/s)
Velocity	± 0.02 ~ 12 m/sec
Turn Down Ratio	1000 : 1
Damping	1 ~ 999 seconds
Required Straight Run	10D upstream, 5D downstream, single path 7D upstream, 3D downstream, dual path
Output	Two 4-20mA (over than 750 OHM) Two Relays (AC/DC Contact Relay)
Input	Two 4-20mA (for pressure, temperature, etc)
Datalogger	8 Mbytes (more than 500,000 points Datalogging)
Display	Large Color Graphic LCD Display (320 x 240 pixel) Flowrate, Total , Velocity, (POS ,NEG ,NET) Input Data, Delta T Ultrasonic Signal Shape, Frequency
Communication	RS-232C, RS-485
Cable	RG62 A/U, Max 200m
Power	AC110 ~ 220V or DC12 ~ 24V (Specify)
Enclosure	NEMA 4, IP65 ,Temp. range: -20 ~ +60 °C
Transducers	Submersible, IP68 ,Temp. range: -40 ~ +120 °C
Software	Download & Reading Data or Custom Configure (option/pending)

# The Best Flowmeters To Check Block Flow Can measure 0.02 m/sec velocity

## Drawings



Dimension

Unit : mm

	A	B	C	D	PIPE SIZE
size B	37	42	23	63	20~80
size C	45	60	35	72	50~300
size D	50	93	35	86	300~1000
size E	76	145	51	111	500~3000
size F	76	145	51	111	2000~6000





## Company Introduction

### Products

Portable Ultrasonic Flowmeter for Liquid  
Compact Ultrasonic Flowmeter for Liquid  
Open Channel Ultrasonic Flowmeter  
Insertion Ultrasonic Flowmeter for Gas  
Spool Piece Ultrasonic Flowmeter for Gas  
Ultrasonic Water Meter  
Ultrasonic Gas Meter  
Wireless Solar Power Flow Monitoring System  
RF Meter Reading System  
Counter Sniper Detection System

### Certification

Korea Calibration Laboratory Accreditation (KOLAS) ISO/IEC17025:2005

New Excellent Products from Ministry of Commerce  
ISO9001  
ISO 14001  
CE

### Awards

Prime Minister Awards  
Ministry of Knowledge and Economy  
Ministry of Environment



Portable Ultrasonic Flowmeter



Compact Ultrasonic Flowmeter