

# Open Channel Flowmeter Xonic 100LM<sup>®</sup>

Xonic100LM Ultrasonic Open Channel Flowmeter use ultrasonic transit-time method for flow velocity and use level meter to receive level data. Xonic 100LM not only measure velocity, but measure sound speed and can compensate temperature change by it's own diagnostic functions. Xonic 100LM is newly developed and has very sophisticated diagnostic functions for better performance.

Xonic 100LM use certified new technology PATENTED "Very precise time measurement method" and also use PATENT "Transducer Design for Open Channel". The patent is about transducers alignment method in field, and engineers can align one transducers to opposite transducer very precisely with laser pointer.



- AR(Anti-Round) Mode
- Transit-Time Method
- DSP Technology
- Display
  - Flow, Total, Sound Speed
  - Signal Strength,
  - Oscilloscope Function

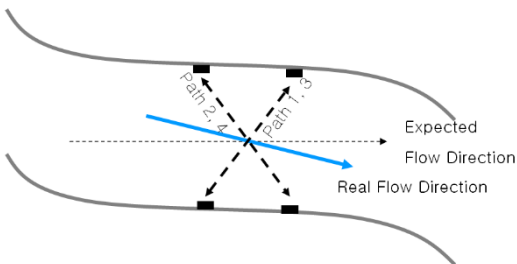
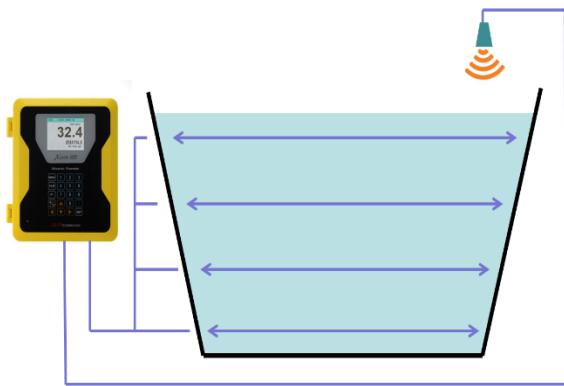
## DSP Technology

Xonic 100LE use Cross-Correlation and Fast Fourier Transform technincs to measure more accurate flow rate. This DSP technology makes X100LM more reliable, maintainable and accurate.



Transducer with Patented  
Laser Pointer Tool

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## Cross Flow Installation

### Application

Xonic 100LM measure flow velocity directly with patented 4 path transducers. Transducers are located at the end of each side to prevent any obstructions, and level is located on the top of the open channel, and accuracy is within 1% of actual flow.

### Cross Flow Installation

In case of winding open channel, Xonic 100LM can use Cross Flow Installation to keep better accuracy. Path 1 & 3, Path 2 & 4 can be installed as cross path to keep better accuracy.

### Specification

- Principle : Anti-Round Mode, Transit-Time With Cross Correlation
- Measuring Path : 2 or 4 path
- Measuring Width : 30 meters
- Accuracy : 2%
- Sensitivity : 0.01 m/s
- Data Output : 4-20mADC, Relay  
RS-232C / RS-485 ModBus
- Data Input : 4-20mADC
- Datalogger : 32Mbytes
- Display : Large Color LCD (128x64)
- Temperature Range  
Electronics: -20 to +60 °C  
Transducer: -40 to +120 °C
- Power : 110~220VAC, free voltage
- Enclosure  
Electronics: NEMA 4 (IP65)  
Transducer: Submersible (IP68)