

T-measurement



TDS-100 Series

TRANSIT TIME ULTRASONIC FLOW METERS

DALIAN TAIJIA TECHNOLOGY CO.,LTD



Application

- ◆ Water and waste water management;
- ◆ Water and waste water treatment plants;
- ◆ Power plants, such as nuclear power plants and hydraulic power plants;
- ◆ Mining and metallurgy plants;
- ◆ Petroleum process monitoring and control;
- ◆ Chemical process monitoring and control;
- ◆ Pulp and paper process monitoring and control;
- ◆ Food and beverage processing;
- ◆ Marine maintenance and operation;
- ◆ Energy supply and production systems;
- ◆ Flow measurement networking.

Liquid

- ◆ Water (hot water, chilled water, city water, sea water, waste water, etc.);
- ◆ Sewage with small particle content;
- ◆ Oil (crude oil, lubricating oil, diesel oil, fuel oil, etc.);
- ◆ Chemicals (alcohol, acids, etc.);
- ◆ Plant effluent;
- ◆ Beverage, liquid food;

Pipe Material

- ◆ Carbon steel
- ◆ Stainless steel
- ◆ Cast iron
- ◆ Ductile iron
- ◆ Copper
- ◆ PVC
- ◆ Aluminum
- ◆ Asbestos



TDS-100 Series

TRANSIT TIME ULTRASONIC FLOW METERS

Low Cost
Clamp-On Transducer
Economical

TDS-100M Ultrasonic Flow Module




The TDS-100M modular ultrasonic flow meter can work alone without a LCD and Keypad module. The module can be used alone as a flow meter. Users can even integrate a number of the modules into a multi-channel flow meter that can measure up to several dozen of different pipes or a flow meter that has higher accuracy by measuring the same pipe with all the channels. The design of the meter is intended to provide for users like system integrators and OEM users with a lowest cost but of high performance flow meter.

- ◆ 8-36VDC
- ◆ 1x MODBUS RS485 ,4-20mA and OCT output
- ◆ 4-20mA and PT100 platinum resistance input
- ◆ 2×20 English letters LCD display
- ◆ 4 key tactile-feedback membrane keypad
- ◆ IP57
- ◆ Operate with clamp-on, insertion and flow-cell transducer
- ◆ Pipe diameters from 15mm to 6000mm
- ◆ GPRS / GSM networking capability with certain model



Clamp-On Transducer



A pair of clamp-on transducers measure the flow from outside of a pipe. There is no pressure drop, no leaks and no contamination. The installation is very simple and no special skills or tools are required.

	S2-type	M2-type	L2-type
Technical parameters			
Pipe size (mm)	DN15~100	DN50~700	DN300~6000
Pipe size (inch)	(1/2~4")	(2~28")	(12~240")
Material	Plastic alloy		
Frequency	1MHz		
Installation method	V(N/W)	V/Z	Z
Calibration	Calibrate with main unit		
Magnetism	Magnetic		
Temperature	32F~320F (0 C~160 C)		
Protection class	IP65		
Cable	Standard length 5m×2. Can be extended to 10m×2 or 15m×2		

Insertion Transducer

A pair of insertion-type transducers are inserted into the pipe wall to interrogate the flow in the pipe. Since the transducers do not extrude into the flow, they do not generate any disturbance or cause any pressure drop. There is no moving parts to wear out.

If the pipe material is carbon steel or stainless steel, it can be installed directly by welding. But if the pipe material is cast iron, FRP, PVC or cement, please contact with the manufacturer to order the dedicated pipe hoop. To prevent leak water, please give the exact outside diameter or perimeter to the manufacturer.

	B-type	B Long-type
Technical parameters		
Pipe size	More than DN80mm	
Material	Ball valve and transducer pole's material: stainless steel, Valve base's material is carbon steel (stainless steel is optional)	
Frequency	1MHZ	
Pipe material	All metals, most plastics, fiber glass, etc.	
Installation method	Z method	
Application of temperature	-40 C-160 C	
Bore size	Φ19mm (please use the manufacture's dedicated tools to drill, it can install with pressure.)	
Pressure class	1.6MPa(less than 0.8MPa when installing)	
Protection class	IP68 (can work in water and water depth ≤ 3 meter)	
Mounting Space	More than 550mm between the well wall and the pipe wall	More than 700mm between the well wall and the pipe wall
Length	186mm	330mm