

Company name	Dalian Teren Industry Instruments Co,Ltd		
	<p>Dalian Teren Industry Instruments Co,Ltd is setting up in the beautiful city Dalian with the sea surrounded . We pay more attention on the running of instruments , our products include the ultrasonic flow meters ,ultrasonic level meters ,ultrasonic water meters ,ultrasonic thickness meters and many the same series products . Our business are established on the basis of good quality ,good price and honest . All the customers will have our best services and share the most reasonable prices .We have very good cooperation with many enterprises in domestic and abroad .We have the good relationship with our partners in Australia ,USA,UK, India ,Italy and many other countries . We also have many domestic suppliers , and we are sure to supply you the satisfied products and good services .</p> <p>If you are interested in any items ,or your customers require to fill ,please contact us ,we will provide you the products with high quality and good services ,and reply you as soon as possible .</p>		
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Legal person representative	Chaoqi Wang	Register number	2102002134153
Enterprise type	Limited liability	Staff	10
Date of Establishment	29th, August ,2005	Registered capital	500,000 RMB
Zip code	116000	Year turnover	1,000,000 RMB
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Products	Dalian Teren Industry Instruments Co,Ltd sell Ultrasonic Flowmeter, Portable Ultrasonic Flow Meter, Pannel-Mount Ultrasonic Flow Meter, Hand-Held Ultrasonic Flow Meter, transit-time ultrasonic flowmeter, ultrasonic water meter, ultrasonic Doppler meter, Wall-mount clamp-on Ultrasonic Flow Meter, level meter ; Ultrasonic Thickness Meter, Hardness Tester, Sound level meter Vibration Meter, Lux meter, Moisture Meter, Surface Roughness Tester. we are the factory in Dalian		
Title	Dalian ultrasonic flow meter ,ultrasonic water meter ,ultrasonic level meter /liquid level meter ,Dalian ultrasonic thickness meter .		
Key words	Instrument ,instruments ,flow meter ,water meter, ultrasonic flowmeter ,ultrasonic water meter, ultrasonic level meter, china flow meter ,china ultrasonic flowmeter ,Dalian flow meter, Dalian water meter, Dalian ultrasonic, china water meter, Dalian ultrasonic flow meter, transit-time ultrasonic flowmeter		
<p>Ultrasonic flowmeter has high accuracy ,better reliable ,high quality and low price .it widely used in measuring water ,sea water ,sewage and Revelation examination, Maintenance , Papermaking , Petroleum and chemical industry .it has five main types , hand-held ultrasonic flow meter ,wall-mounted ,portable ultrasonic flow meter ,pannel-mount and flameproof flow meter .The transducers include the clamp-on ,insert transducer ,pipe style transducer .</p> <p>The advanced circuit design ,the integration of the latest semiconductors ,the user-friendly software interface both in English and Chinese languages and small sized PCD board ,all these features combine to make the TR-100 series ultrasonic flow meter the best and the biggest seller on the Chinese market .And it will gain more and more recognition on the international flow meter market .</p>			

Portable Ultrasonic Flow Meter

Chinese and English menu

No touching with liquid, small size

Apply to measuring every size pipe

Water, seawater, sewage, PH liquid, oils and other liquids

2*20 light LCD display, light type board

Inner Ni-H battery can work 10 hours, temperature

Accuracy : 1%

Printer output and RS-232 output

Power :2W

A ex-proof box for using under bad condition 180*180*100mm 2kg

Flameproof Ultrasonic Flow Meter

Pipe materials steel, stainless steel, cast iron, current pipe, copper, PVC, aluminum, glass steel.

Intern diameter 20mm—6000mm

Straight pipeline upstream 10D, downstream 5D, 30D away from the pump.

Measuring fluids Water, seawater, sewage, PH liquid, oils and other liquids.

Capable of ultrasonic wave propagation.

Temperature: -10~150

Turbidity: ≤10000 ppm

Direction: Positive and negative to calculate

Flow rate: 0~32 m/s

Pannel-Mount Ultrasonic Flow Meter

Accuracy 1.0 %

Pipe materials Steel, stainless steel, cast iron, current pipe, copper, PVC, aluminum, glass steel

Intern diameter 20mm—6000mm

Straight pipeline Upstream 10D, downstream 5D, 30D away from the pump

Measuring fluids Water, seawater, sewage, PH liquid, oils and other liquids capable of ultrasonic wave propagation

Temperature: -10~150

Turbidity: ≤10000 ppm

Direction: Positive and negative to calculate

Flow rate: 0 ~ 32 m/s

Hand-Held Ultrasonic Flow Meter

4 line character LCD display the flow rate, flow speed, calculation flow, signal

Inner data memory, can record date, flow, working time.

RS-232 output

OCT output, surge signal, frequency signal 1~9999Hz

Water, seawater, sewage, PH liquid, oils and other liquids capable of ultrasonic wave propagation

Inner Ni-H battery can work 10 hours

Flow rate0~30m/s

Accuracy 1%

Size201*92*42mm

Weight538g

ultrasonic water meter

Low power ultrasonic water meter is designed according to Europe alliance EN1434 standard and ultrasonic time-difference principle. It can instead of other water meter and it has other characters: High accuracy, better reliable, no moving part, no need to set data. Install in any angle. Ultrasonic time-difference principle
Measuring water or other liquid

Accuracy: 1%, 2%
Repeatability: 0.5%
Measuring period: 3S, 1~31S(selection)
Battery can work 6-10years, or two line power
Lowest measuring velocity of liquid 0.01m/s
No pressure lost and moving parts, no nursing for 10 years
Pipe length designing according to the normal water meter
IP68, can working under water lower than 2 meters
Foundry in mould, no reveal
DN15-1000mm
Ceramic sensor apply to -40~160
Over look type, normal type, separate type

Sound level meter series

Application :Used to test the sound level of environment ,mechanic,vehicle,ship and other noise .Fit for industry ,enviromental protecting ,working ,sanitation,teaching research and other departments.

TR-5868P / TR-5858/TR-5866/TR-5826

standard :GB/T3785,IEC651 Type2,ANSIS1.4Type 2 .

Measuring range :

Lp :

A : 30-130dB / L:35-100dB H:80-130dB

C ; 35-130dB

Line:40-130dB / 35-130dB

Ln:0-100%

DC output : 10mv=1dB Resolution: 0.1dB. Accuracy:1dB.LCD display,

power supply :4*1.5VAAA battery / 1*9V6F22 battery /4*1.5VAA battery

Dimensions : 236*63*26mm / 195*72*31mm / 233*68*32mm

weight(not including battery) 170g/195g/158g/175g

TR-5856 TR-5818

standard : IEC651 Type2,ANSIS1.4Type 2

Measuring range :

A : 30-130dB/30-130dB

C: 30-130dB/ 35-130dB

Resolution: 0.1dB.Accuracy:1dB. LCD display .power supply: 4*1.5VAA(UM-3)battery

Dimensions: 210*69*32mm.weight: 175g.

Ultrasonic Thickness Meter

Application: uesd for measuring thickness and corrosion of pressure vessels,chemical equipment,boiler,oil storage tanks,etc.In industries of petroleum ,shipbuilding,power station,and machine manufacturing.

TR-8812 /TR-8811 TR-8810

Measuring range:1.0~225mm /1.2~200mm / 1.2~200mm

0.05~9 inch /0.06~8 inch /0.06~8 inch

sound velocity: 500~9000m/s. Resolution : 0.1mm. Accuracy: $\pm(0.5\%n+0.1)$. operating conditions : 0~40°C/10~90%RH. Dimensions: 120*62*30mm /160*68*32mm
. weight: 164g/208g

Coating thickness meter series

TR-8828 TR-8825FN/TR-8826FN TR-8825N/TR-8826N TR-8825F/TR8826F

Measuring range: 0~1250um/0~50mil (default range)

Resolution : 0.1/1. Accuracy: $\pm 1\sim 3\%n$ or $\pm 2.5um$. Min.measuring area : 6mm. Min.sample thickness : 0.3mm.

power supply: 4*1.5VAAA(UM-4)battery. Dimensions:126*65*27mm weight: 81g

Cable and software for RS-232C

TR-8829

TR-8829FN TR-8829N TR-8829F

Measuring range: 0~1250um/0~50mil . Resolution : 0.1/1. Accuracy: $\pm 1\sim 3\%n$ or $\pm 2.5um$

Min.measuring area :5mm

Min.sample thickness : 0.3mm. power supply: 4*1.5VAAA(UM-4)

Dimensions:124*62*30mm. weight: 115G(TR-8829) 200G(TR-8829S)

Cable and software for RS-232C ,other ranges

TR-8822 TR-8821 TR-8823 TR-8822F TR-8822N

Measuring range: 0~1000um/0~40mil . Resolution : 0.1/1. Accuracy: $\pm 1\sim 3\%n$ or $\pm 2.5um$

Min.measuring area :6mm

Min.sample thickness : 0.3mm. power supply: 4*1.5VAA(UM-3). operating conditions : 0~40°C/10~90%RH.

Dimensions: 160*68*32mm.weight: 250g /210g

Other range :0~200um to 15000um

Moisture series

Application :applicable of wood fiber materials,wooden articles,Chinese traditional medicine,tobacco,cotton paper ,building ,soil and other fibre material .

We have the **Multifunctional Moisture meter** with pin type and search type ,moisture range is 0~80% and 0~50%,resolution is 0.1. LCD display ,accuracy $\pm(0.5\%n+1)$ and ± 1 . dimesion 165*62*26mm ,220*77*43mm and 182*68*38mm.Cables and soft ware for RS-232C. we have the pin moisture meter with 2*10LED display ,and accuracy $\pm 1\%$,weight is 55g and 127g. Grain moisture meter mearsuring range 7~30% and 8~20% .temp is -10~55C. LCD display ,accuracy $\pm(0.5\%n+1)$.

Humidity meter series

Widely used in workshops,office ,plants,libraries,computer stations,laboratories and warehouses..

With separate sensor or in built sensor ,range of humidity 0~100%RH and 10~95%RH, tem is -10~65C . Accuracy is 2.5% $\pm 1\%$ RH, $\pm 0.5C$.

Vibration meter series

Used for measuring periodic motion,to check the imbalance and deflecting of moving machinery .

We have the vibration meters with frequency of 0.1 to 10 KHz,accuracy less than 5%,AC output 2.0V peak full scale .the operating conditions is 0C~45C/ 0~40C(32F~104F),<90% or =90%RH

Cable and software for RS-232C interface .

Lux meter series

widely used in electro-optical sources, research teaching, metallurgy building, industry inspection as well as agriculture researching and illumination control.

They can measure 0~50,000LUX, 0~5,000FC. the accuracy is $\pm 5\%$, low battery indicator, 180g or 143g.

Temperature meter series

Used to measure the temperature of liquids, gases, solids and surface temperature.

We have the measuring range -50~800C, -50~1300C, -5~150C, Accuracy is $\pm 0.75\%$ $\pm 1^{\circ}\text{C}$ and $\pm (0.3\%n+1)$. LCD display, 132*64*30mm / 220*77*43mm / 143*43*23mm.

Surface roughness series

Widely used in production site to measure surface roughness of various machinery-processed parts. calculate corresponding and clearly display all measurement parameter.

Dew point meter series

widely used in workshops, offices, plants, libraries, computer stations and warehouses.

Range: dew point -40~40⁰C, humidity 0~100%RH, tem is -10~65⁰C. Accuracy $\pm 1^{\circ}\text{C}$, 2.5% $\pm 1\%$ RH, $\pm 0.5^{\circ}\text{C}$. time response 2⁰C/S.

Anemometer series

We have six types of this meter, Measure wind scale 0~12 level, accuracy $\pm 2\%$ $\pm 2d$. it can measure four kinds of wind speed. it is suit for many requests.

Tachometer series

We have six types, and they can measure different rotative velocity and surface speed, good accuracy, distance from 50~600mm, or LED 50~200mm. powersupply is 4*1.5VAA(UM-3), resolution 0.01/0.1/1.

Stroboscope series

Any cases to measure the rotational speed of a rotating object and to inspect the defect on its surface without the need to adhere any mark to reflect the light, and thereby without the need to halt the object from its rotation.

2 ranges (high, low), $\pm (0.05\%n+1d)$, resolution 0.1/1.

Low cost ultrasonic flowmeter

Welcome to the ultrasonic flow transmitted module that is the general flow meter equipped with small volume, easy operation, more functions, advanced performance and low price. Its flow rate resolution is 0,001m/s. This product can work without connecting keyboard display. The parameter can be finished through the keyboard (the interface is inside, can insert or pull out when charging) or through the parameter software of the computer. and this product can be used in all kinds of ultrasonic transducers manufactured in Teren company, and meanwhile, we supply the parameter input window of the ultrasonic transducers manufactured by customers themselves and the similar products of domestic manufactures.

The ultrasonic flow transmitted module has the important meaning in the developing history of ultrasonic flow meters. It will change the customers' formerly idea of the heavy and expensive.

This product can be used as an independent ultrasonic flow meter, or many modules combine for the measurement of crowded pipe network area. It also can be combined into a flow meter with more sound track and high accuracy, especially suit for the industry control systems and other projects.

电磁流量计

特点

- ★ 测量管内无可动部件，便于维护管理；无阻流部件，因此无压力损失。
- ★ 被测液体最低电导率 $\geq 5\mu\text{ s/cm}$ ，配合各种衬里材料，可适用于测量各种酸、碱、盐溶液及泥浆、矿浆、纸浆等介质的流量。
- ★ 流量的测量不受流体的密度、粘度、温度、压力和电导率变化的影响，传感器感应电压信号与平均流速呈线性关系，测量精度高。
- ★ 合理选用衬里及电极材料，可实现良好的耐腐蚀性和耐磨性。

- ★ 低频矩形波励磁，不受工频及现场各种杂散干扰的影响，工作稳定可靠。
- ★ 不受流体方向影响，正反向均可准确计量。
- ★ 量程比 1: 120(0.1m/s~12m/s)，满量程流速范围宽。
- ★ 汉字液晶背光显示，可在线修改参数，操作简单方便。
- ★ 具有空管测量、报警功能，并能适应不同的流体介质。
- ★ 掉电时间记录功能，自动记录仪表系统电源间断时间，补算漏计流量。
- ★ 小时总量记录功能，以小时为单位记录流量总量，适用于分时计量制。

三、测量原理

电磁流量计是运用法拉第感应定律原理，即导电物体在磁场中作切割磁电线运动时，导体中产生感应电动势。其感应电动势 E 为：

$$E=KBdV$$

流量 Q 为： $Q=3600 \times V \times S$

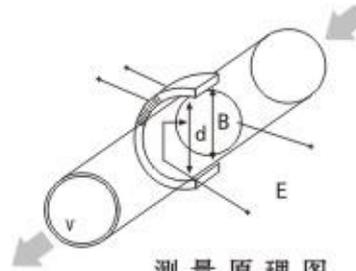
式中：K—仪表系数

B—磁感应强度(T)

d—电极间距(m)

V—流体平均流速(m/s)

S—导管内截面积(m²)



测量原理图

测量流量时，导电性液体以流速 V 流过垂直于流动方向的磁场，导电性液体的流动感应出一个与平均流速成正比的电压，其感应电压信号通过与液体直接接触的电极检出。对于同一流量计 S、B、d 为常量，所以流量与感应电动势 E(或流速 V)的大小成正比。

电池电磁流量计

显著特点：

- 全球首家完成了具有跨时代意义的电池电磁流量计，有效的确保“在线测量准确度”。
- 首创国际领先的励磁技术，励磁电路简洁，稳定可靠。
- 将“模糊算法”技术应用于“电磁流量计”的测量，具备人工智能的性能。
- 采用电容式技术的空、满管检测技术，杜绝误报警的出现。
- 采用出厂保存设置功能，使仪表各参数万无一失。
- 高阻快速响应设计，无失真采集微弱信号和快速反应流量变化，量程比可达 100: 1。
- 具有低电导测量功能。
- 具备转换器互换的一致性，无须重新检定参数。
- 提供传感器零点修正以及自动校零功能。
- 中文（英文）友好界面，满足各方使用要求。

技术参数：

- 口径：DN10~DN1200
- 测量范围：0.05m/s~10m/s
- 准确度：0.4m/s~10m/s 时为 0.5 级、0.1m/s~0.4m/s 时为 1 级
- 重复性：测量值的 1/3
- 中英文显示屏：瞬时流量，流速、百分比流量、正向反向净累积总量可设置以及各报警。
- 输出信号：频率 0~5kHz 幅值 24V 无源；RS485（可选）；GPRS 通讯
- 励磁方式：高频励磁
- 励磁频率：1/4、1/2 通过设置可选择

供电电源：3.6VDC 功率：小于2mW