#### По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72 Астана +7(7172)727-132 Белгород (4722)40-23-64 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Новосибирск (383)227-86-73 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Тверь (4822)63-31-35 Томск (3822)98-41-53 Тула (4872)74-02-29 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Ярославль (4852)69-52-93

Единый адрес для всех регионов: crw@nt-rt.ru || www.cowell.nt-rt.ru

## **TDS-100H Handhold Ultrasonic Flow Meter**

## Description

TDS-100H Handhold Ultrasonic Flow Meter is based on clamp-on transittime flow measurement principle. It measures the flow rate of liquid in a pipe from outside of the pipe by using a pair of ultrasonic transducers. It is applicable for water, sewage, oils, chemicals, wastes, beverage and liquid food, solvents and other liquids.



TDS-100H Handhold Ultrasonic Flow Meter

#### **Technical Parameter**

- Accuracy: ±1% of reading at rates>0.6 ft/s. ±0.5% with on-site calibration
- · Linearity: 0.5%
- Repeatability: 0.2%
- Velocity:  $\pm 0.03 \sim \pm 105$  ft/s ( $\pm 0.01 \sim \pm 30$  m/s),bi-directional
- Pipe Size:15 ~ 6,000mm
- Temperature: -20~60 °C; 0-160°C
- Display & Record: 4x16 English letters of Instantaneous flow, accumulative flow, velocity, Signal State, Time etc.
- Communication Interface: RS232, RS485, OCT output & 4~20mA etc.
- Power Supply: 100V-240VAC for the rechargeable 3 AAA Ni-H built-in batteries. It lasts 12 hours work while fully charged.

# **Optional Sensors**







DN 15-100 mm

HS Frame Sensor HM Frame Sensor S1 Sensor DN 15-100 DN50-700 mm

M1 Sensor DN50-700mm

L1 Sensor DN300-6000 mm

## **Standard Components**











Main Set

M1 Type Sensor

Cables

Protect Box & Accessories

#### TDS-100F Wall-mounted Ultrasonic Flow Meter



TDS-100F1 Wall-mounted Ultrasonic Flow Meter



TDS-100F2 Wall-mounted Ex-proof Ultrasonic Flow Meter

# Description

TDS-100F Wall-mounted Flow Meter uses multipulse ultrasonic time difference principle, doublebalanced differential signal transmitter. It measures the flow rate of liquid in a pipe from outside of the pipe by using a pair of ultrasonic transducers. It is applicable for water, sewage, oils, chemicals, wastes, beverage and liquid food, solvents and other liquids.

## **Technical Parameter**

• Accuracy: ±1%

• Repeatability: 0.5%

• Measuring period:500ms

• Transducer Temperature: -40~160 °C

• Pipe Size:15 ~ 6,000mm

• Display: Backlight LCD displays instantaneous flow,

- accumulative flow, velocity, Signal State, Time etc.
- Communication Interface: RS232, RS485, OCT output
- & 4~20mA, etc.
- Power Supply: AC220V or DC8-36V or AC7-30V
- Power Consumption: 2W

# TDS-100M Heat-Module Ultrasonic Flow Meter



TDS-100M Ultrasonic Flow Meter-Heat Module

#### Description

TDS-100M Series Ultrasonic Flow meter-Heat Module is low cost ultrasonic flow meter, which is the latest innovation. It employs cutting-edge technology on ultrasonic transit-time measurement, digital signal processing and surface mounting electronics. It provides abundant capabilities for accurate liquid flow measurement from outside of a pipe. The proprietary signal quality tracking and self-adapting techniques allow the system to optimally adapt to different pipe materials automatically.

#### **Technical Parameter**

- Accuracy: ±1%; Better than ±1% for velocity above 0.6ft/s
- · Repeatability: 0.2%
- Response Time:0.5s
- · Velocity: 0-32m/s
- Pipe Size:25 ~ 6,000mm
- Transducer Temperature: 0~100 °C
- Display & Records: LCD Display Instantaneous flow,accumulative flow, velocity, Signal State, Time etc.Keyboard for optional.
- Input: 2 Route 4-20mA analog input with accuracy 0.1%;Input pressure, liquid level, temperature signal etc. 2 Route, three lines of PT100 Platinum resistance.
- & 4~20mA, etc.

- Communication Interface: RS232, RS485, OCT output & 4~20mA, Relay Output etc.
- Power Supply: Isolation 8~36 VDC

#### TDS-100W Series Ultrasonic Water Meter

# COPPO

Thread Connection DN15-50mm

# Description

Low power ultrasonic water meter is designed according to Europe alliance EN1434 standard and ultrasonic time-difference principle. High accuracy, better reliable, no moving part, no need to set data, install in any angle. It can replace other water meter.



Flange Connection DN50-1000mm

#### **Technical Parameter**

Accuracy: ±1%
Repeatability: 0.5%

Measuring Range:DN15-1000mm

Working Pressure: Environment:-40 °C~80°C

Medium: -40 °C~160°C

Measuring period: 3S, 1~31S(selection)

Output: 4~20mA, RS232,RS485, MBUS, GPRS, CDMA Power: One Li 3.6V Battery working for 6-10years,

or two line power

Velocity of liquid: 0.01m/s

Protection Class: IP68, can working under water lower than

2 meters, ExdIIBT4

Connection Type: Overlook type, normal type, separate

type

TDS-100P Portable Ultrasonic Flew meter



TDS-100P Portable Ultrasonic Flew meter



sensor

#### Description

Welcome to the TDS-100P (Version 13.0) ultrasonic flow meter that has been manufactured with patent technologies and is equipped with more functions and advanced performance than our previous versions.

Other outstanding features:

--the signal receiving circuits feature self-adapting performance so as to ensure

that the user can easily operate the instrument without any adjustment.

--the built-in rechargeable Ni-H battery can work continuously for about 20 hours without recharging.

The advanced circuit design, the integration of the latest semiconductors, the

user-friendly software interface both in English and Chinese languages, all these

features combine to make the TDS-100P ultrasonic flow meter the best and the biggest seller on the Chinese market. Moreover, it is gaining more and more

recognition on the international flow meter market.

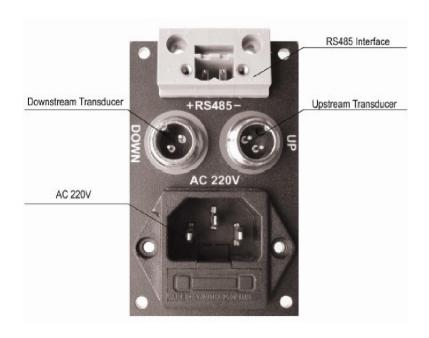
#### **Technical Parameter**

- High accuracy: Linearity: 0.5%, repeatability:0.2%, accuracy up to ±1%.
- Non-contacting measuring: The ultrasonic flow meter will be adsorbed on the outside of pipe, and then finish the measuring. Nonintrusive, clamp-on transducer, no pressure drop, no pipe disturbance
- Wide measuring range: Several types transducer for selection, pipe size from DN15mm to DN6000mm
- Chinese & English menu: Chinese & English display, easy to operate.
- Large capacity battery: Built-in rechargeable Ni-MH rechargeable battery, provide over 20 hours of continuous operation.
- Built-in printer: Built-in mini thermal printer with instant and timing print function, also you can print more than 20 kinds of measuring results if you set in advance.
- Built-in data logger: Uplink over 20 measuring data to computer or internet.

# Front View:



# Left View:



Optional Transducers

Optional Transducers	Model	Description	Measuring range	Temperature
Small size transducer	TS-1	Magnetic	DN15-100mm	-40∼110℃
Medium size transducer	TM-1	Magnetic	DN50-1000mm	-40∼110℃
Large size transducer	TL-1	Magnetic	DN300-6000mm	-40∼110℃
High-temperature small size transducer	THS-1		DN15-100mm	-40∼160°C
High-temperature medium size transducer	THM-1		DN50-1000mm	-40∼160°C

#### По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72 Астана +7(7172)727-132 Белгород (4722)40-23-64 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41

Новосибирск (383)227-86-73 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78

Нижний Новгород (831)429-08-12

Новокузнецк (3843)20-46-81

Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Тверь (4822)63-31-35 Томск (3822)98-41-53 Тула (4872)74-02-29 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Челябинск (351)202-03-61 Череповец (8202)49-02-64

Ярославль (4852)69-52-93

Единый адрес для всех регионов: crw@nt-rt.ru || www.cowell.nt-rt.ru