



Ultrasonic Flow Meter TDS-100F5

TRANSMITTER	
Accuracy	±1% of reading, plus ±0.006m/s(±0.02ft/s) in velocity
Repeatability	Better than 0.2%
Velocity range	±0.03~±105ft/s(±0.01~±30m/s),bi-directional
Measurement period	0.5S
keypad	4 x 4 tactile-feedback membrane keypad
Display	LCD with backlight, 2x 20 letters
Units	English(U.S.) or metric
Outputs	Analog output:4-20mA or 0-20mA current output. Impedance 0-1K Accuracy 0.1%
	Isolated OCT output: for frequency output (0~9,999Hz), alarm driver, or totalizer pulse output, ON/OFF control, etc.
	Relay output <u>1A@125VAC</u> or <u>2A@30VDC</u> . For ON/OFF control, alarm driver, totalizer output, etc.
	Sound alarm
Inputs	RTD interface (optional): two temperature channels that can accommodate two PT100 3-wire temperature sensors for thermal energy measurement. Analog input: one channel of 4-20mA input. Can be used for temperature, pressure or liquid level sensor
Data Logger	Optional SD data logger from 1G~8G.
Recording	Automatically record the following information: "The positive/negative/net flow/heater totalizer data of the last 512days/128monts/10years "The power-on time and corresponding flow rate of the last 30 power on and off events. Allow manual or automatic flow loss compensation.
Communication Interface	Isolated RS-485 with power surge protection. Support the MODBUS protocol. extending flowmeter protocol.
Other function	Capable of offline compensation for flow totalizer, automatic/manual selectable. Self-diagnosis
Enclosure	Die-cast aluminum enclosure. Protection Class:IP65.(NEMA 4X).Weather-resisitant.
Weight	2.5kgs
Power supply	85-264VAC/8-36VDC
Temperature	-10" ~70"
Humidity	85%RH

Clamp-on type	Standard S1 for 1”~4”(DN25-DN100mm) Standard M1 for 2”~28”(DN50-DN700mm) Standard L1 for 11”~240”(DN300-DN6000mm) High temperature S1H for 1”~4”(DN25-DN100mm) High temperature M1H for 2”~28”(DN50-DN700mm)
Insertion wetted type	For 3”~240”(DN80-DN6000mm)
Flow-cell inline type	For DN15-DN1000mm
Protection Class	Transducers: IP68
Transducer temperature	Standard clamp-on type: 0” ~70” High temperature clamp-on type: 0” ~150” Insertion wetted type: 0” ~150” Flow-cell inline type: 0” ~150”
Transducer cable	Shielded transducers. Standard length 15’(5m).Can be extended to 1640’(500m).Contact the manufacture for longer cable requirement. Cable should not be laid in parallel with high-voltage power lines, neither should it be close to strong interference source such as power transformers.

LIQUIDS

Liquid Types	Virtually all commonly used clean liquids. Liquids with small quantity of tiny particles may also be applicable. Particle size should be less than 100um, particle concentration less than 20,000ppm or <2%. Liquid should contain no or very minor air bubbles.
Liquid Temperature	-40” ~155” depending on transducer type

Pipe

Pipe size	DN25-DN6,000mm(0.5”~240”)
Pipe material	All metals, most plastics, fiber glass, etc. Allow pipe liner
Straight pipe section	15D in most cases, 30D if a pump is near upstream, where D is pipe diameter



transducer	Standard S1 type	Standard M2 type	Standard L2 type	High temperature S1H type	High temperature M2H type
Suitable pipe diameter	DN15-DN100	DN50-DN700	DN300-DN6000	DN15-DN100	DN50-DN700
Fluid	0°C ~ 70°C	0°C ~ 70°C	0°C ~ 70°C	0°C ~ 160°C	0°C ~ 160°C