

Water Conductivity and Flow Meter Sensor TDS



Features:

The Water Conductivity and Flow Meter Sensor TDS is a dual-function sensor designed for monitoring both water flow rate and total dissolved solids (TDS) content. It uses a precision NPN pulse output for flow rate detection and a separate TDS measurement interface for conductivity analysis. Built with a durable plastic housing and quick-connect 6mm pipe fittings, it provides reliable, leak-free performance under varying water pressure conditions. The sensor is ideal for use in water purifiers, dispensers, and industrial water systems that require real-time flow and quality tracking.

Specifications	
Material	White Plastic
Function	Flow and Conductivity (TDS) Sensing
Connection Type	Quick Link OD6.5 mm for ID6 mm Pipe
Flow Rate Range	18–600 L/hour
Flow Pulse Formula	$F(\text{Hz}) = 24 \times Q (\text{L}/\text{min}) \pm 2\%$
Accuracy	$\pm 2\%$
Operating Voltage	DC 5–18 V
Minimum Voltage	DC 4.5 V
Maximum Working Current	15 mA (DC 5 V)
Load Capacity	≤ 10 mA (DC 5 V)
Pressure Range	0.1–0.8 MPa
Operating Temperature	-25 °C to $+60$ °C
Signal Output Type	NPN Pulse Output
Wiring (Flow)	Red: +V, Black: GND, Yellow: Signal Output
Wiring (TDS)	Red/Blue: Conductivity Measurement
Usage	Water purifiers, dispensers, filtration, and IoT water control

Pinouts:

Pin Name	Type	Description
Red	Input	Power supply +V (5–18 V DC)
Black	Ground	System ground
Yellow	Output	NPN pulse signal for flow rate
Red (TDS)	Input	Power input for TDS measurement
Blue (TDS)	Output	TDS conductivity signal

