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Smart Digital High-Pressure pH Sensor

The Turtle Tough Smart Digital pH sensor for High-Pressure applications withstands high pressures up to 290 psi (2.0Mpa) in complex industrial environments. The unique glass element provides superior measurement across a wide range of harsh chemical conditions.

Features

- Superior measurement across harsh chemical conditions.
- High performance in complex environments
- Excellent resistance to poisoning and contamination
- Strong polypropylene body
- Plug and Play connectivity
- Communication: MODBUS RTU (RS-485) output
- Ideal for high-pressure industrial applications, viscous fluids, proteins, silicate, chromate, cyanide, NaOH, seawater, brine, petrochemical, natural gas liquids and high-pressure environments





**TURTLE
TOUGH**

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The high strength glass bulb has a large surface area to increase its ability to sense hydrogen ions, allowing it to perform well in complex environments. The double salt bridge design and unique internal sealing methods provide excellent resistance to poisoning and contamination while providing long life under adverse conditions.

The sensor's polypropylene body has incredibly high mechanical strength and resilience. It is also resistant to various organic solvents and strong acids and alkalis.

The Smart Digital Sensor with direct MODBUS RTU output can directly interface with your industrial network or connect with our range of communication hardware. This sensor is ideal for high-pressure applications and a wide variety of process conditions including, viscous fluids, proteins, silicate, chromate, cyanide, NaOH, seawater, brine, petrochemical and natural gas liquids.

SMART Sensor Technology

SMART Sensors have revolutionised the way our customers manage and maintain sensors. Unlike most other smart sensors, Turtle Tough provide you with the option of a propriety digital signal or an open-source Modbus RTU signal that is universally accepted. This allows the sensor to be directly connected to your industrial network without the need for proprietary hardware. Turtle Tough also provide state-of-the-art analysers and controllers should you require a sophisticated turnkey control solution. SMART sensors have the added benefit of storing a detailed performance history and diagnostics on-board enabling superior sensor management. Sensors can be cleaned and calibrated offline to facilitate a hot-swapping maintenance regime. Need to know more about [hot-swapping?](#) Ask our team



Product name	Smart Digital - High-Pressure pH Sensor
Code	TT-HP-pH-DSS-1768D
Power/Output communication	12 VDC / RS485 MODBUS RTU
Measurement mode	Glass/silver+ silver chloride; SNEX
Housing material	Polypropylene
Waterproof rating	IP68
Measurement range	0-14pH
Measurement accuracy	±0.05pH
Pressure resistance	-1.0~2.0Mpa (up to 290 psi)
Temperature range	0-90 °C
Connection	Quick Connect Plugs
Cable length	10 m cable (optional lengths available)
Thread	3/4" MNPT
Application	High pressure industrial applications, viscous fluids, proteins, silicate, chromate, cyanide, NaOH, seawater, brine, petrochemical, natural gas liquids, high-pressure environments