

SPECIFICATIONS

Accuracy

(Maximum percent of error in measurement)

Pressure: Less than or equal to 0.02% of full scale output (FSO) over temperature range referenced to a straight line stretched from zero PSI to maximum pressure

Temperature: Internal temperature $\pm 1^\circ\text{C}$ over temperature range

Resolution

(Smallest change detectable in output signal)

Pressure: 1 part in 1,000,000 (0.0001%)

Temperature: 1 part in 1,000,000 (0.0001%)

Linearity

Less than 0.02% deviation from a straight line referenced to end points

Pressure Hysteresis

Less than 0.01% of FSO

Long-term Stability

Accuracy drift is less than $\pm 0.05\%$ of FSO per year

Standard Pressure Ranges

Pressure	Depth	Accuracy
0 to 15 PSI	0 to 34.6 ft.	± 0.007 ft.
0 to 30 PSI	0 to 69.20 ft	± 0.014 ft.

Custom calibration ranges available from 5 - 100 PSI

Pressure Overload

Less than 2 times the rated pressure

SDI-12 Interface

Baud Rate: 1200

Protocol: SDI-12 V1.3, 7-bit even parity, 1 stop bit

Output Voltage Levels:

Minimum high level: 3.5 volts

Maximum low level: 0.8 volts

Response Time

SDI-12: 6-second measurement sequence (programmable)

RS-485 Interface(Industrial Mode Only)

Protocol: Modbus RTU/H-355 Control

Port: RS-485

Baud Rate: Programmable (default=9600)

RS232 Interface

Protocol: RS232, 8bit, No Parity, 1 stop bit

Baud Rate: 9600

0-5V Analog Output

Resolution: $4\mu\text{V}$ (12-bit DAC)

4-20mA Output(Industrial Mode Only)

Type: 4-20mA, optically isolated

Loop Voltage: 8.0V min, 35V max

Resolution: $4\mu\text{A}$ (12-bit DAC)

0-5V Analog Output

Resolution: $4\mu\text{V}$ (12-bit DAC)

4-20mA Output(Industrial Mode Only)

Type: 4-20mA, optically isolated

Loop Voltage: 8.0V min, 35V max

Resolution: $4\mu\text{A}$ (12-bit DAC)

Quadrature Output

Output Voltage:

Low: 0.4(Max)@-5mA

High: 2.5(Min)@5mA

Power Requirements

Voltage Input: 10 to 16.0 Volts DC

Supply Current:

Sleep Mode $700\mu\text{A}$ max

Active (measuring) 80mA max

Surge Protection: Built in, 1.5 KVA

Environmental

Operating Temperature: -40°C to 60°C

Compensated Range: -40°C to 60°C

Storage Temperature: -40°C to 80°C

Media Compatibility

Non-corrosive dry gases only

Mechanical

Material: Fiberglass

Size: 4.76" x 4.76" x 2.5" high

Rating: NEMA 4 enclosure

Connectors: Sealed Bendix type circular

Pressure Inlet: 1/8" female NPT

Atmospheric Vent: Sintered bronze, #10-32

Connections

7-pin circular: Power, SDI-12, Quad, and 0-5V

3-pin circular: RS232 Communications port

Cables: Main Connector cable with 6-ft pigtail is provided

RS-232 Connector cable optional

The **WATERLOG**® H-3531 FlashLite™ is warranted against defects in materials and workmanship for one year from date of shipment.

Notes

Specifications subject to change without prior notice due to ongoing commitment to product testing and improvement.