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Model LT2100 series

Water level recording sensor
Stainless steel sensor
Measuring ranges from 2bar to 11bar
Built-in lithium battery
Maximum 50,000 records

The LT2100 consists of a water level and water temperature sensor that has its own time clock and memory to store the collected data, in a compact stainless-steel case. This frees users to place the sensor in remote sites and let it collect data for long periods. The sensor can then be retrieved, connected to a PC via a Data interface, and the data transferred to the PC. software is included and elegantly supports test setup, data retrieval, and data display. LT2100 has an absolute pressure sensor inside, to measure lower level, please be careful of atmosphere change. We suggest installing a barometer or another Water Level Recording Sensor to record atmospheric pressure. And then calculate two pressure differences of two instruments by computer, that is the final level value; Please pay attention to get LT2100 back from the measurement point, then remove end cap and read record through data interface.

Features

- Measuring ranges from 2bar...11bar Absolute pressure
- Records pressure, temperature and time
- Low power consumption, 3.6VDC lithium battery of 5-year life
- High stability, good data security
- Maximum 50,000 records
- Restore factory settings available
- Easy-to-use software

Application

- Drinking water systems
- Ground water monitoring

Technical data

Measuring range				
Nominal pressure [barA]	2	3	6	11
Overpressure [barA]	4	6	12	20

Performance	
Accuracy*	0.1%FS @ 0...+40°C (Typ.) 0.2%FS @ -10...+60°C (Typ.) [1]
Operating Temperature	-10 to 60 °C
Compensated Temperature Range	-10 to 60 °C
Pressure Resolution	0.01%FS
Temp. Resolution	0.1 °C
Temp. Accuracy	±1 °C
Vibration	20 g RMS(20 to 2000Hz)
Shock	20 g(11ms)
Cycles	$10x10^5$
Long Term Stability	0.2%FS

Electrical @25°C	
Output Options	4-wire RS485 Modbus RTU
Insulation Resistance	100 MΩ@50VDC
EMC Test	IEC61000-6-2/IEC61000-6-3
Power Requirements	Internal user-replaceable 3.6VDC/2400mAh lithium battery
Battery Life	5 years (when logging interval is once per hour)
Power Consumption	Quiescent < 30 uA
Record interval	1s...255h.59m.59s.

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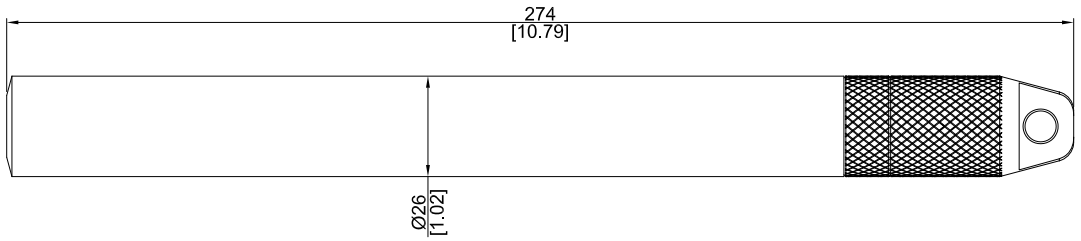
Physical Specifications	
Housing	316L stainless steel
Diaphragm	316L stainless steel
Sealing ring	Viton
Oil Filling	Silicone oil
Protection	IP68
Weight	~500g

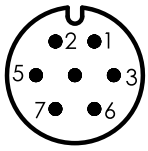
1) Linearity (best straight line) + Hysteresis + Repeatability

Dimensions in mm [in]



Electrical connections

Aviation plug electrical connection	PIN	definition
	1	RS485A
	2	RS485B
	3	GND



Other pin is null,
Pin 3 connects to GND of circuit inside. Generally, it can only connect to RS485A and RS485B. If RS485 communication has big disturbing, please connect to GND.

Range code

Code	Nominal pressure [bar]	Absolute
00	0...2	√
01	0...3	√
02	0...6	√
03	0...11	√
99	Custom	√

Ordering code

Model	Range	Type	Output	Accuracy	Label
LT2100	**Code**	**A** Absolute	**D4** RS485 Modbus RTU	**A1** 0.1%FS	**S** Standard
				A2 0.25%FS (Standard)	**N** Neutral label
				A3 0.5%FS	**C** Custom label

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