

Diffused Silicon Piezo-Resistive Type Level Transmitter

The PROLEVEL 500 by **Labtech Electronics Pvt. Ltd.** is a high-performance piezo-resistive pressure-based level transmitter designed for continuous liquid level measurement. It operates on the principle that the measured liquid level static pressure is proportional to the height of the liquid column. Compact, stable, and reliable, it offers accurate level measurement in harsh industrial and environmental conditions.

Key Features

- Based on diffused silicon piezo-resistive sensing technology
- High accuracy and long-term stability
- 4-20 mA analog output (optional RS485 Modbus)
- Non-corrosive SS304 / SS316 diaphragm design
- · Lightning, surge, and reverse polarity protection
- Suitable for submersible or flange-mounted installation
- · Compact, rugged body for industrial applications

Parameter	Specification
Measuring Range	0-10 m, 0-20 m, 0-50 m (customizable)
Accuracy	±0.25% F.S.
Repeatability	±0.1% F.S.
Stability	≤0.1% F.S. per year
Output Signal	4–20 mA, RS485 (Modbus RTU)
Power Supply	24 VDC (optional 12–36 VDC)
Sensor Type	Diffused silicon piezo-resistive element
Process Temperature	-20°C to +85°C
Ambient Temperature	-20°C to +60°C
Pressure Range	Up to 4 bar
Material (Wetted Parts)	SS304 / SS316L
Cable Material	Polyurethane / Teflon (PTFE)
Protection Class	IP68 (sensor) / IP65 (transmitter)
Electrical Connection	Waterproof connector / cable gland
Mounting Type	Submersible / threaded / flange
Communication Protocol	HART / Modbus (optional)

Applications

Water and wastewater treatment plants Chemical and process industries Environmental monitoring Power and energy utilities Industrial process control Reservoirs, wells, and storage tanks



Benefits

Accurate and stable performance
Easy installation and commissioning
Low maintenance, long service life
Cost-effective solution for continuous monitoring

