

levelpro 6100

advanced liquid level sensor



Features

- accuracy better than +/- 0.05% of full scale
- compact, robust design
- simultaneous analogue and digital data output
- integrated LCD display and keypad
- low cost of ownership
- ranges 0-5m to 0-70m
- stage - volume conversion
- firmware upgradeable with more features

Applications

- River, irrigation, channel water level and discharge monitoring
- groundwater level and landfill monitoring
- dam, tank and reservoir levels
- tidal monitoring
- waste water monitoring
- flood warning systems
- process industry liquid level

The levelpro 6100 advanced liquid level sensor is ideally suited to accurately measure pressure in gas bubbler systems used for water level determination. For process industry applications where instrumentation cannot be in contact with the liquid, the 6100 can be used remotely from the liquid being measured and

features a level to volume conversion for typical container shapes. Pressure measured by the 6100 is converted to water/ liquid level, or tank volume. Featuring micro-processor controlled, state of the art electronics, the 6100 delivers excellent precision and stability and offers simultaneous analogue and digital outputs for direct, easy connection to most popular input devices including loggers, PLCs and RTUs.

The levelpro is housed in an attractive machined plastic enclosure and is sealed to IP67 and NEMA 6 standards. The multi-line LCD display allows easy configuration of the sensor and shows current readings. Sensors are supplied with power, signal cables and comprehensive user manual.



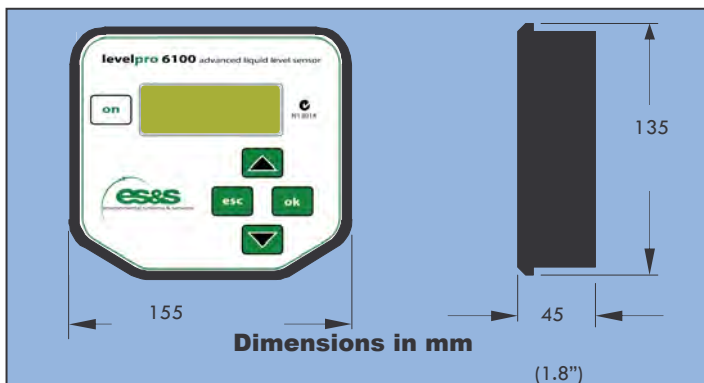
Technical Specifications

<p>Range: 10, 20, 35, 70 meters freshwater. -non standard ranges available.</p> <p>Accuracy: Digital output (Display, RS232, SDI-12): Linearity: +/-0.05% of FS Temperature: +/-0.001% per °C Repeatability: +/-0.01% of FS Long term drift: <0.05% of FS/year Analogue output: +/-0.15% over 0°C to +50°C</p> <p>Resolution: Analogue: 12 bit Digital: 16 bit Display: 0.1mm water</p> <p>Units: kPa, psi, feet, inches, meters, centimeters, flow and volume units based on above.</p> <p>Temperature range: operating: 0°C to +50°C</p> <p>Response Time: from standby: 0.25s to full accuracy From power-up 1 second to full accuracy</p> <p>Type: Piezo resistive pressure sensor vented to atmosphere (gauge type)</p>	<p>Output Options: Analogue: - 4-20mA current, 3 wire loop (up to 600 ohm load @12Vdc) - 0-1 Volt or 0-2.5 Volt Digital: - SDI-12 data - RS232C data Simultaneous digital and analogue output</p> <p>Tube Connection: ¼" BSP female fitting as standard with a selection of tube fittings available.</p> <p>Power Supply: 8-26 Volts DC unregulated standby: <10mA active: <120mA plus current loop (backlight on) <25mA plus current loop (backlight off)</p> <p>Surge Protection: Inputs/ outputs protected against transients by a secondary protection circuit that can absorb up to 1.5kW for 1ms.</p> <p>Enclosure: IP67 rated machined delrin plastic. Display: 4 line x 20 character LCD (7 x 5 dot matrix) with Backlight, extended temperature range.</p> <p>Weight: 0.85 kg</p>
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Operating Principle

The 6100 levelpro determines water/ liquid level by measuring backpressure of a gas bubbler system. A low cost plastic tube is submersed in the fluid to be measured and purged with inert gas. The pressure of the "head" of water above the tube orifice is the same as can be measured

up at the "dry" end where the pressure is measured and converted to head of liquid. The key advantage of this technique of level measurement is that the electronics are remote from the fluid, ensuring long term reliability, low risk and reliability.



Stainless steel wall mounting bracket

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