

"THE WELL BUBBLER" Compressed Air Well Level Sensor

About

The Well Bubbler forces compressed air through a tube installed in the well to accurately measure the standing and pumping well levels - the same approach used by well drillers and pump installers. The well level is automatically calculated from the length of the tube and the air pressure, stored in the data logger, or reported online.

Benefits

The Well Bubbler was developed after years of struggling with hydrostatic, "pressure-type", and acoustic well level sensors. Submersible pump motor wiring and tight clearances cause hydrostatic sensors to snag during installation. Turbine pump motors drip oil into the well, clogging and fouling the sensor. The pump can be damaged by "swallowing" the sensor body and wiring. VFD noise can make pressure-type sensors unreadable, while engine noise and splashing water affect the accuracy of acoustic sensors.

The Well Bubbler can be safely installed with all pump and motor types - it is not affected by oil in the well, VFD noise, or engine noise. In many cases, an air line is already installed in the well, for a truly "plug-and-play" installation.

Features

- Record flow rate* - compatible with pulse-type flow meters
- Integrated solar power* - no wiring, assembly or AC power required
- Secure data logger* - view and download well level & flow history
- Telemetry output* - 4 to 20mA and 0 to 5Vdc for most telemetry systems & SCADA
- Compatibility* - use with standard, 1/4" diameter air tubing
- External power input* - increase sample rate with AC power or solar panel
- External power output* - used to power flow meters
- Cellular data reporting and text alerts*



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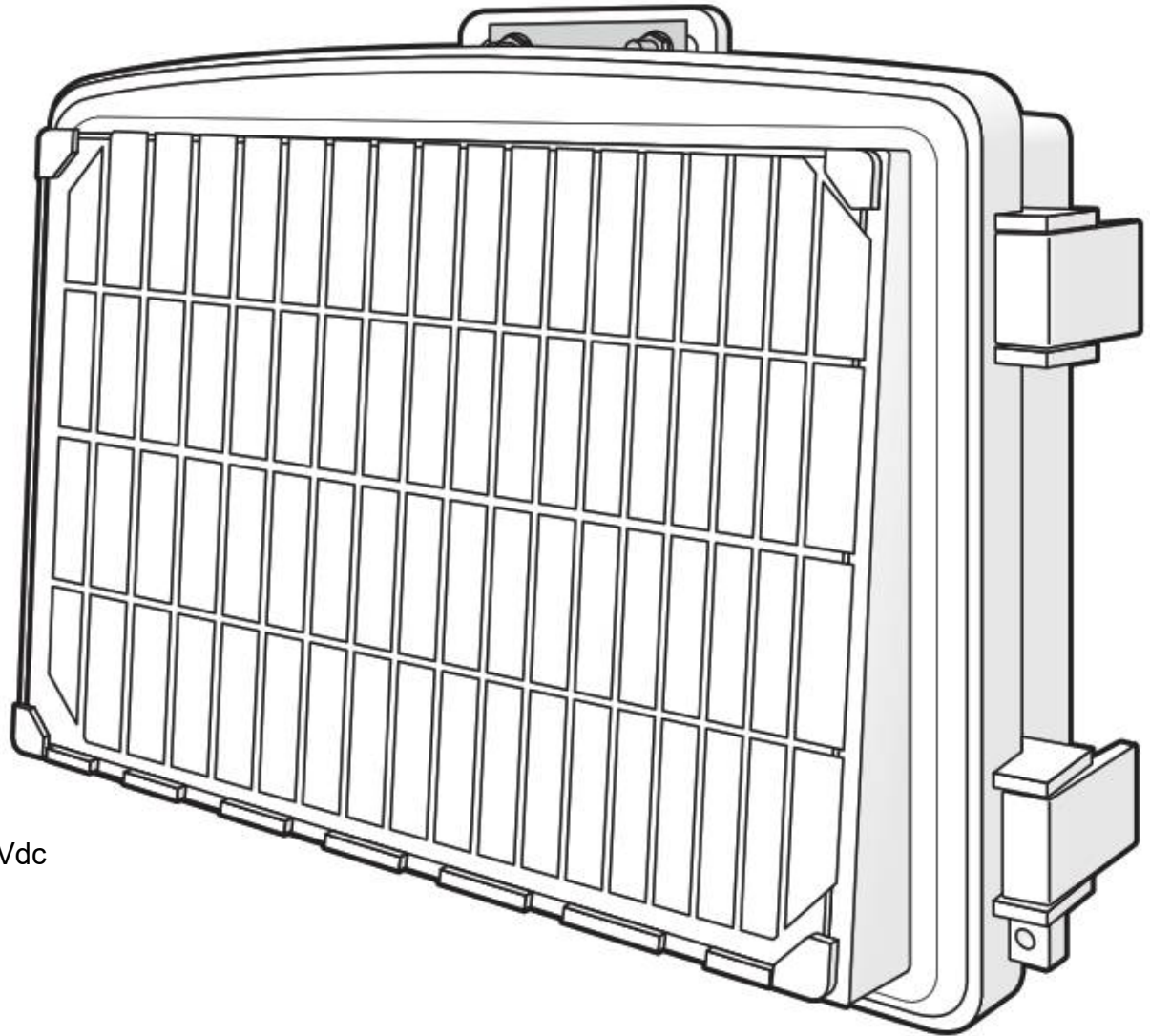
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PART NUMBER **5-120**

REVISION: 1.4
DATE: 06/06/19

Compressed Air Well Level Sensor
Pump Controller, Data Logger



SPECIFICATIONS

Electrical

Maximum operating pressure: 150 psi
Measurement range (SWL - PWL): 350 ft
Accuracy: +/- 0.25% at 77F (25C)
Total error band: +/- 1.0% (5F to 131F)
Operating temperature range: 5F to 131F
Sample rate: 60 min max, 30 min typ
Telemetry output: 0-5 Vdc, 4-20 mA, 10-bit
Flow meter input: pulse type, 0.1Hz-100Hz, 12Vdc
External DC power input: 1A @ 18-24Vdc
External power output: 0.25A @ 12Vdc

Mechanical

ASA Plastic enclosure, NEMA 12 and IP65
External dimensions: 13.75" X 10" X 4.15" (W x H x D)
Weight: 15 lbs
Air tube compatibility: 1/4" OD, push to connect

Data / Communication

Data logger capacity: 1MB or 65,546 data points
Storage: ~2 years at 15 min sample rate
Cellular communication (optional): Verizon LTE-M

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