THE WELL BUBBLER 10-200
Well Monitoring System

About

The Well Bubbler forces compressed air through an airline installed in the well to accurately measure the standing and pumping water levels - the same approach used by well drillers and pump installers. The well level is automatically calculated from the length of the airline and the air pressure, and is shown on the display in feet.

Benefits

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

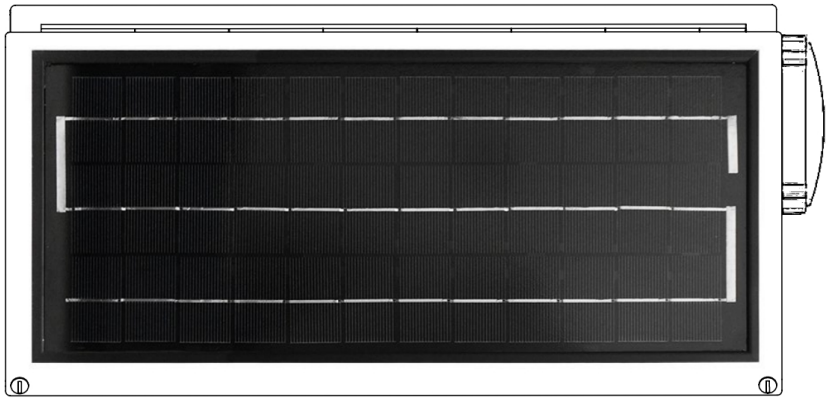
The Well Bubbler can be safely installed with all pump and motor types - it is not affected by oil in the well, electrical VFD noise, or engine noise. In many cases, an air line is already installed in the well, for a truly "plug-and-play" installation.

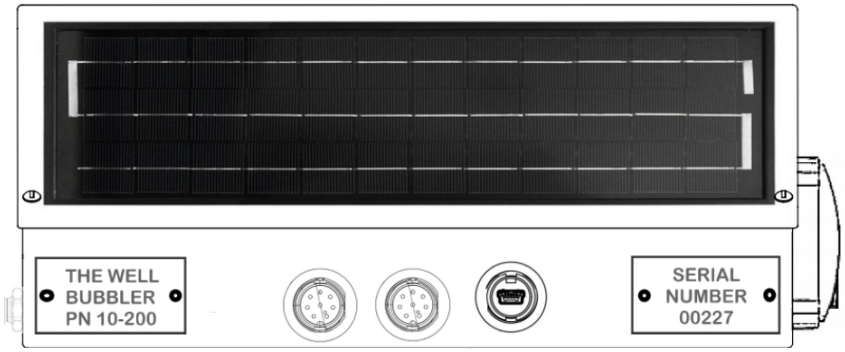
Features

Cellular data reporting and text alerts
Record flow rate - compatible with pulse-type and 4-20mA flow meters
Record pump power & pressure - use standard 4-20mA transducers
Integrated solar power - no wiring, assembly or AC power required
LCD display - visible in bright sunlight, back light for night-time visibility
Relay output - stop the pump when well level is low, restart delay option
Secure data logger - view and download well level & flow history
Telemetry output - 4 to 20mA and 0 to 5Vdc for most telemetry systems
Compatibility - use with standard, 1/4" diameter airline
External power input - for use with remote solar panels or DC power
External power output - used to power flow meters and telemetry

PACIFIC COAST ENGINEERING

PART NUMBER: 10-200	**REVISION:** 4.4
DRAWN BY: A. BUGROV	**DATE:** 8.14.22
WEB: www.wellbubbler.com	**PH:** 805.610.7752





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SPECIFICATIONS

Mechanical

Enclosure: 14-ga powder coated steel, NEMA 12 and IP65
External dimensions: 19 1/4" x 7 1/2" x 7" (W x D x H)
Weight: 37 lbs
Mounting: Strut channel, 1-5/8
Air line compatibility: 1/4" OD, push to connect

Electrical

Maximum operating pressure: 200 psi
Measurement range (SWL - PWL): 460 ft
Sample rate, with external DC power: 5 min
Sample rate, integrated solar: 30 min max, 60 min typical
Accuracy: +/- 0.25% at 77°F (25°C)
Operating temp range: 5°F to 131°F (-15°C to 55°C)
Telemetry output: 0-5 Vdc, 4-20 mA (isolated), 10-bit
Flow meter input: pulse type, 0.1Hz-100Hz, 12Vdc
Discharge pressure input: 12Vdc, 4-20mA transducer
Pump current input: 12Vdc, 4-20mA transducer
Pump control relay: 5A @ 120Vac, SPST
External power input: 1A @ 18-24Vdc
External power output: 0.25A @ 12Vdc
Integrated solar power: 10 Watt, monocrystalline
Integrated storage battery: 12Vdc, 18Ah, sealed lead-acid

Data / Communication

Data logger capacity: 65,546 data points
Storage: ~2 years at 15 min sample rate
Cellular communication: Verizon 4G / LTE