

# Web-Enabled Ultrasonic Level Sensor and Modbus Controller Series: LOE



The LOE ultrasonic sensor series is designed for remote level measurement. Simply plug in your ethernet cable for inexpensive, web-based remote level measurement. They are fully programmable for various applications, giving the user complete control. Each LOE can also serve as a Modbus network controller for up to 10 slave sensors.

## Features

- Programmable response time
- RS-485 Modbus communication
- LAN embedded webpage



# LOE Specifications

LOE-2126, LOE-6126



LOE-3136



## Performance

- Operating Range
  - LOE-2126: 1 - 25 ft. (0.3 - 7.62 m)
  - LOE-3136: 1.5 - 40 ft. (0.46 - 12.19 m)
  - LOE-6126: 7 - 180 in. (0.18 - 4.57 m)
- Beam Pattern: 9° off axis
- Internal Temperature Compensation
- Frequency:
  - 69 kHz - LOE-2126, LOE-6126
  - 43 kHz - LOE-3136
- Accuracy:  $\pm 0.25\%$  of detected range
- Resolution: 0.1 in. (2.5 mm)
- Response Time: Up to 5 Hz, or once every 200 ms

## Connectivity

Output:

- Ethernet TCP/IP to internal web page or APG website
- Up to 2 Isolated Solid State Relays (120V / 120 mA max)

Input:

- RS-485 Modbus (up to 10 slave sensors)
- Up to 2 discrete switches

## Environmental

- Ratings: IP65
- Operating Temp:
  - 40° - 140°F (-40° - 60°C)

## Electrical

- Total Current Draw: 80 mA @ 24 VDC
- Supply Voltage: 24 VDC
- Power Rating: 2.0 W max
- Wiring Connection: 6 conductor shielded cable

## Programming

- Programmable via the APG website or LAN
- User selected units of measure

## Physical

- PVDF transducer housing
- PCB/PET blend upper housing

# Model Configuration Options

Model Number: LOE -      -       
                                  A      B

## A. Model

- ☐ **2126**            1 - 25 ft. (305mm - 7620mm); 69 kHz; 2" NPT threads
- ☐ **3136**            1.5 - 40 ft. (458mm - 12192mm); 43 kHz; 3" NPT threads
- ☐ **6126**            0.6 - 15 ft. (178mm - 4572mm); 69 kHz; 2" NPT threads

## B. Relay Configuration

- ☐ **0000**            2 relay outputs
- ☐ **0010**            1 relay output, 1 switch input
- ☐ **0110**            2 switch inputs

# Common Model Configurations

Model Number	Model Description
LOE-2126-0000	1 - 25 ft range, 69 kHz, 2" NPT, 2 relay outputs
LOE-3136-0000	1.5 - 40 ft range, 43 kHz, 3" NPT, 2 relay outputs

## LOE Accessories

Please order separately, by part number.

Description	Part Number
<b>POE</b>	
POE Installation Kit - includes POE Power injector and cable (7 ft. orange cross-over cable and 7 ft. red Ethernet cable)	125695
POE Injector 48 V, 0.42 A and cable	136281-0001
<b>Ethernet Extension Cables</b>	
7 ft. orange crossover	136282
7 ft. red cable	136283-0007
25 ft. red cable	136283-0025
7 ft. blue cable	136284-0007
25 ft. blue cable	136284-0025
<b>POE Power Injector (Power Supply)</b>	
POE Injector 48 V, 0.42 A and cable	136281-0001



# Tank Cloud

## Put Your Tanks In The Cloud

### 1 Remote Sensors

Connect to any 4-20mA signal or APG Modbus sensor for constant access to your data. Access up to 10 sensors on a single connection.

### 2 Use the Internet Backbone

Connect the APG sensor or module to the Internet via landline, radio, cellular, or satellite.

### 3 View Secure Data 24/7

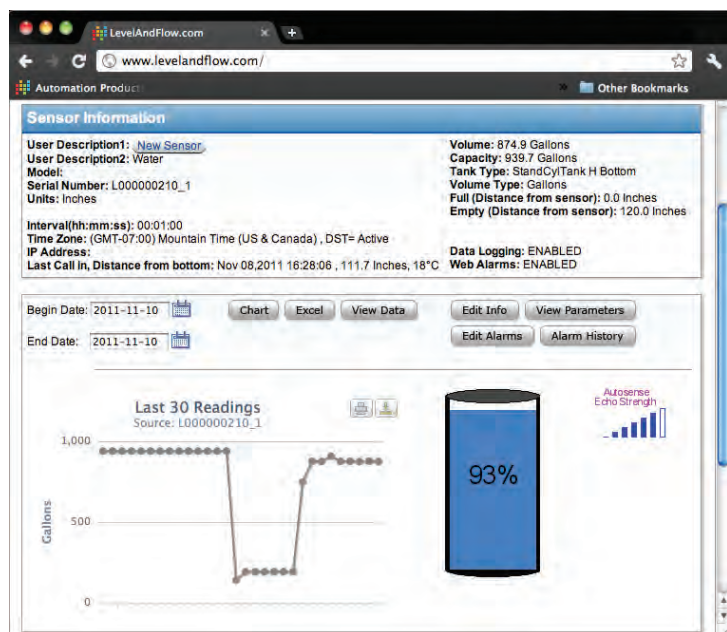
Access sensor data online through our secure portal at [levelandflow.com](http://levelandflow.com). If the Internet is accessible, so is your information.

### 4 Stay Up-To-Date

Program custom alarms - receive email and text (sms) message alerts on your computer, mobile phone, or tablet.



## The Line-Up:



## Online Data Portal

The Tank Cloud data portal, located online at [levelandflow.com](http://levelandflow.com) displays everything you need to know about your measurement.

Here you can:

- View your current and past readings,
- Manage alarms,
- Configure your sensors,
- and Setup user permissions for others in your organization.

Measurements are sorted by location and grouped into sites. Simply select the site you would like to view, and then choose the sensor. Current readings are prominent in the center of the screen.

Contact us today at to set-up a demonstration of our sensors and online software. We are excited to show you how it can impact your business.