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

## 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**: ±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

## 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

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

LOE Accessories

Please order separately, by part number.

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

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<td>LOE-2126-0000</td>
<td>1 - 25 ft range, 69 kHz, 2” NPT, 2 relay outputs</td>
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<td>LOE-3136-0000</td>
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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. 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 www.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 888-525-7300 to set-up a demonstration of our sensors and online software. We are excited to show you how it can impact your business.