Thank You

Thanks for purchasing an LPU-2127 loop powered ultrasonic level sensor from us! We appreciate your business and your trust. Please take a moment to familiarize yourself with the product and this manual before installation. If you have any questions, at any time, don’t hesitate to call us at 888-525-7300.

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1. Description

The LPU-2127 loop powered ultrasonic level sensor provides continuous level/distance measurement you can count on. It comes with a built in keypad for easy programming and is certified for installation in hazardous areas in the US and Canada by CSA for Class I, Division 2, Groups C & D and Class I, Zones 2 environments.

2. How To Read Your Label

Each label comes with a full model number, a part number, and a serial number. The model number for the LPU-2127 will look something like this:

SAMPLE: LPU-2127

The model number tells you exactly what you have. You can also call us with the model, part, or the serial number and we can help you.

You'll also find all hazardous certification information on the label.

3. Warranty

APG warrants its products to be free from defects of material and workmanship and will, without charge, repair or replace any equipment found defective upon inspection at its factory, provided the equipment has been returned, transportation prepaid, within 24 months from date of shipment from factory.

THE FOREGOING WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESSED OR IMPLIED BY OPERATION OF LAW OR OTHERWISE INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No representation or warranty, express or implied, made by any sales representative, distributor, or other agent or representative of APG which is not specifically set forth herein shall be binding upon APG. APG shall not be liable for any incidental or consequential damages, losses or expenses directly or indirectly arising from the sale, handling, improper application or use of the goods or from any other cause relating thereto and APG’s liability hereunder, in any case, is expressly limited to the repair or replacement (at APG’s option) of goods.

Warranty is specifically at the factory. Any in-use service will be provided at the sole expense of the Purchaser at standard field service rates.

All associated equipment must be protected by properly rated electronic/electrical protection devices. APG shall not be liable for any damage due to improper engineering or installation by the Purchaser or third parties. Proper installation, operation and maintenance of the product becomes the responsibility of the user upon receipt of the product.

Returns and allowances must be authorized by APG in advance. APG will assign a Return Material Authorization (RMA) number which must appear on all related papers and the outside of the shipping carton. All returns are subject to the final review by APG. Returns are subject to restocking charges as determined by APG’s “Credit Return Policy”.

4. Dimensions

525-7300.

www.apgsensors.com | phone: 888-525-7300 | email: sales@apgsensors.com

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The LPU-2127 should be installed in an area—indoors or outdoors—which meets the following conditions:

- Ambient temperature between -40°C and 60°C (-40°F to +140°F)
- Adequate space for maintenance and inspection

Additional care must be taken to ensure:

- The sensor has a clear, perpendicular sound path to the surface being monitored.
- The sensor is mounted away from tank or vessel walls and inlet.
- The sound path is free from obstructions and as open as possible for the 9° off axis beam pattern.
- The sensor is tightened by hand to avoid cross-threading.

*Important For user interface guide and sensor configuration see the full user manual.

5. Sensor and System Wiring Diagrams

LPU-2127 Wiring

**Wiring Instructions:**

- With the lid of your LPU closed, use a screwdriver to remove the cable knock out.
- Clear the flashing.
- Open the lid of your LPU and insert cable gland or conduit connection.
- Set 12-28 VDC supply wire to (+) Terminal.
- Connect 4-20 mA output wire to (-) Terminal.
- Connect 4-20 mA output wire to (+) Terminal.
- Connect 4-20 mA output wire to (-) Terminal.

*Note: Load resistance @ 12VDC: 150 ohms Max and @ 24VDC: 600 ohms Max.

6. How To Read Your Label

- Sample: LPU-2127
- Model number
- Part number
- Serial number

7. General Care

- Maintenance and inspection
- Attention to electrical connections
- Protection from external influences

8. Repair Information

- Return Material Authorization (RMA) number
- Transportation prepaid
- Repaired or replaced equipment

9. Hazardous Location Wiring

**Important:** Refer to section 9 for Hazardous Location Wiring.
**General Care**

Your level sensor is very low maintenance and will need little care as long as it was installed correctly. However, in general, you should periodically inspect your LPU-2127 sensor to ensure the sensor face is free of any buildup that might impede the function of the sensor. If sediment or other foreign matter becomes trapped on the sensor face, detection errors can occur.

If you need to remove the sensor, be sure to store it in a dry place at a temperature between -40° and 180° F.

**Repair Information**

If your LPU-2127 loop powered ultrasonic level sensor needs repair, contact us via email, phone, or online chat on our website. We will issue you an RMA number with instructions.

- Phone: 888-525-7300
- Email: sales@apgsensors.com
- Online chat at www.apgsensors.com

**Hazardous Location Wiring**

![Diagram of Hazardous Location Wiring]

- Install in accordance with Section 33 of the IEC or Article 500 of the NEC.
- CSA listed or NRTL listed conduit seal at location A & B as required by local Authority.
- The cable is terminated in the sensor and runs continuously from the sensor through the hazardous area and into the non-hazardous area.
- Electrical equipment connected to associated apparatus should not generate more than 250 V rms.
- Tooling or replacement with non-factory components may adversely affect the safe use of the system.

![Diagram of Non-Incendive Wiring]

- WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD –
  - Damage with only a static clamp
  - MANIPULATION – surface non-conducting do not allow severe direct
  - Never exceed the maximum voltage
  - Do not disconnect while circuit is live
  - Unless area is known to be non-hazardous
  - Manipulation of the equipment can cause a spark of 6700 Vrms.

![Diagram of Loop Powered Wiring]

**REVISIONS**

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