

## Thank You

Thanks for purchasing an LPU-2127 Loop Powered Ultrasonic Sensor from us! We appreciate your business and your trust. Please take a moment to familiarize yourself with the product and this guide before installation. If you have any questions, at any time, don't hesitate to call us at 435-753-7300. You can also find a full list of our product install guides at:

[apgsensors.com/resources/install-guides](http://apgsensors.com/resources/install-guides)

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# LPU-2127

## Loop Powered Ultrasonic Sensor

### INSTALLATION GUIDE



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Doc # 9004172 Rev C  
Part # 122950-0008  
01/2026

### 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.

### 4 Installation Instructions

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)
- Ample space for maintenance and inspection

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

- The sensor has a clear, perpendicular sound path to the surface being monitored.
- The sensor is mounted away from tank or vessel walls and inlets.
- 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.

### 2 How to Read Your Label

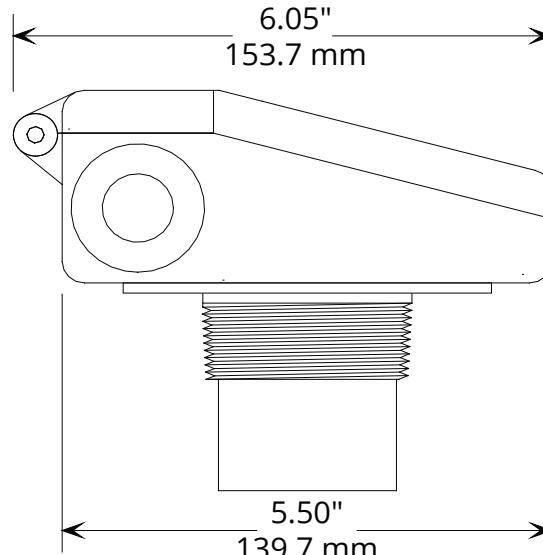
Each label comes with a full model number, a part number, and a serial number. The model number for the LPU-2127 will look something like this:

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.

### 5 Dimensions



### 3 Warranty & Return Information

This product is covered by APG's warranty to be free from defects in material and workmanship under normal use and service of the product for 24 months. For a full explanation of our Warranty, please visit

[www.apgsensors.com/warranty-returns/](http://www.apgsensors.com/warranty-returns/)

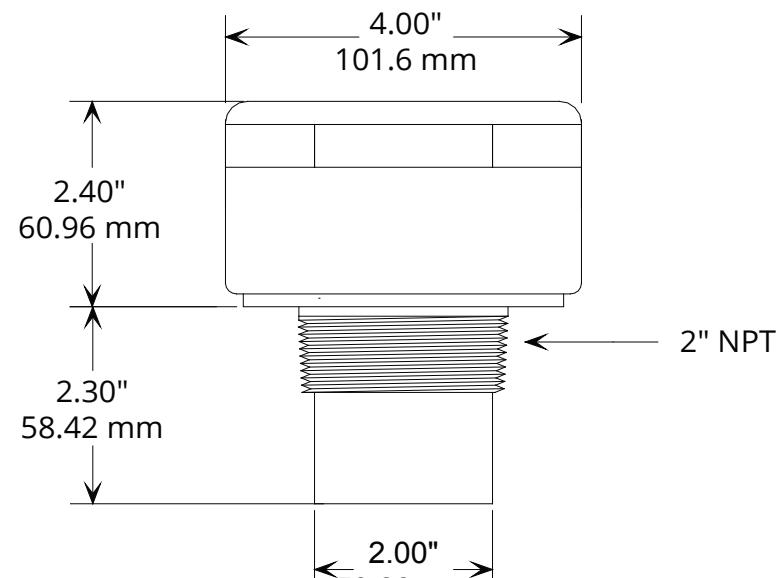
Contact Technical Support to receive a Return Material Authorization (RMA) before shipping your product back.

If your product needs to be returned for evaluation, contact us via email, phone, or online chat on our website. We will issue you an RMA number with instructions. You can also find the form on our website by clicking "RMA" in the web footer, or go to

[apgsensors.com/RMA-form](http://apgsensors.com/RMA-form)

- Phone: (435) 753-7300
- Email: sales@apgsensors.com
- Online chat at apgsensors.com

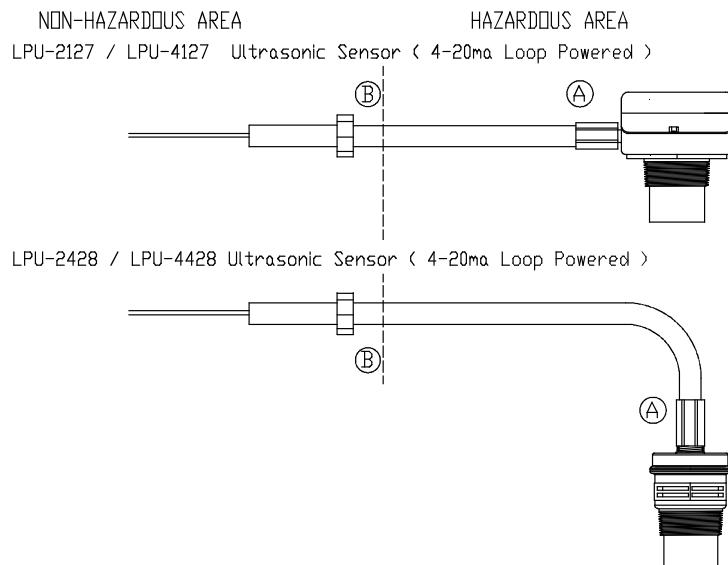
Please have your part number and serial number available.



## 6 Hazardous Location Wiring

REVISIONS						
ZONE	REV	DESCRIPTION	CHANGE	ORDER	DATE	APPROVED
—	D2	Add French Warning	CO-	2260	3-22-15	K. REID

## Installation in Class I Division 2 Groups C and D Class I Zone 2 A EXnA IIB



- Install in accordance with Section 18 of the CEC or Article 500 of the NEC.
  - CSA listed or NRTL/UL 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.
  - Tampering or replacement with non-factory components may adversely affect the safe use of the system.

PROPRIETARY AND CONFIDENTIAL  
THIS DRAWING IS THE PROPERTY OF  
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LOGAN, UTAH AND MAY NOT BE  
USED, REPRODUCED, PUBLISHED, OR  
DISCLOSED TO OTHERS WITHOUT  
WRITTEN CONSENT OF THE COMPANY.  
IF LOANED, IT IS SUBJECT TO RETURN  
UPON DEMAND AND MAY NOT BE USED  
IN ANY WAY DIRECTLY OR INDIRECTLY  
DETRIMENTAL TO THE COMPANY.

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 AND TOLERANCES ARE AS FOLLOWS:  
 TOLERANCE ON ANGLE:  $\pm 1^\circ$   
 2 PLACES:  $\pm .01''$   
 3 PLACES:  $\pm .005''$

INTERPRET DIMENSIONS AND TOLERANCES  
 PER ASME Y14.5-2009

APPROVALS	DATE	 <b>AUTOMATION PRODUCTS GROUP, INC.</b> 1025 West 1700 North Logan, Utah USA 888.525.7300					
DRWN	k NR						12-8-03
CHKD	Travis B	12-10-03	Hazardous Installation Drawing For LPU-2127, LPU-4127, LPU-2428 & LPU-4428				
APVD	K. REID	12-10-03					
CONTRACT			SIZE	CAGE CODE	PART NO	DOCUMENT NO	REV
MATL							
FINISH			SCALE	NONE	DO NOT SCALE DRAWING	SHEET	1 OF 1

APPROVALS	DATE
WN	KNR 12-8-03

AVERTISSEMENT - surface non conductrice du boîtier peuvent être facturés par MEDIA non conductrice , CLEAN avec un chiffon humide  
DO NOT DISCONNECT WHILE CIRCUIT IS ALIVE  
UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS

DO NOT DISCONNECT WHILE CIRCUIT IS ALIVE  
UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS

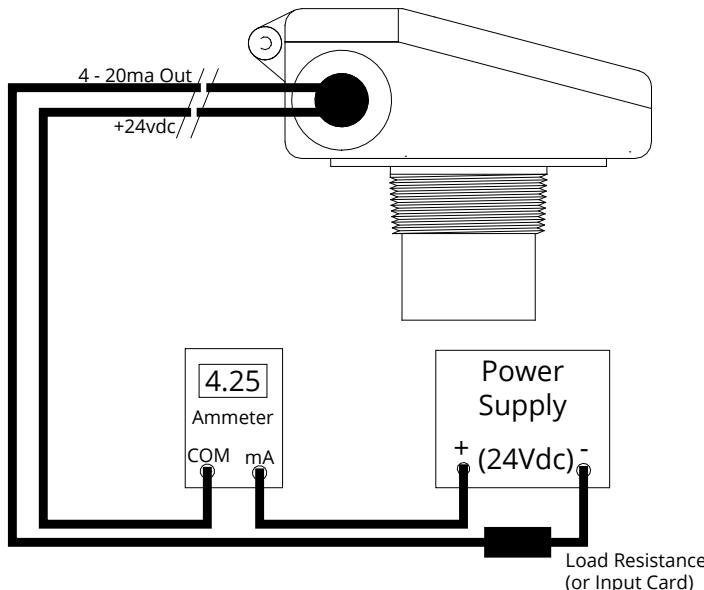
AVERTISSEMENT—NE PAS DEBRANCHER TANT QUE LE CIRCUIT EST SOUS  
TENSION, A MOINS QU'IL NE S'AGISSE D'UN EMPLACEMENT NON DANGEREUX

- DO NOT DISCONNECT WHILE CIRCUIT IS ALIVE  
UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS

AVERTISSEMENT-NE PAS DEBRANCHER TANT QUE LE CIRCUIT EST SOUS  
TENSION, A MOINS QU'IL NE S'AGISSE D'UN EMBRANCHEMENT NON DANGEREUX

## 7 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 install cable gland or conduit connection.
  - Connect 12-28 VDC supply wire to (+) Terminal.
  - Connect 4-20 mA output wire to (-) Terminal

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

## 8 General Care & Notes

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.