

## Product Features

- *Simple push-button calibration (Accurate)*
- *Output 4-20 mA / 20-4 mA*
- *Built-in temperature compensation*
- *Optional RS232 or Rs485 communications with calibration, diagnostics and data logging software*
- *PLC compatible*
- *Three or four wire operation*
- *Soft cleaning operation of sensor face*
- *1" and 6" NPT process connections*

## Description

INTEMPCO has released a new family of LTU series ultrasonic level probes. The LTU10 is the most powerful and penetrating sensor in this family. It is relatively large and features a PVC housing with 6" NPT face mounting and 1" NPT cover mounting. Due to its high power output, the LTU10 is capable of measuring dry bulk powders under dusty conditions up to 90ft range.

## Operation

The new LTU series ultrasonic transducers, with very high efficiency, narrow beams and wide frequency bandwidth, work in many conditions over wide temperature range. They are insensitive to mountings, and with help of the transceiver and smart signal processing, they eliminate unwanted echoes from tank walls, stand-pipes and many other buildups. LTU transducers provide a self-cleaning operation, so their faces eliminate almost any buildup and condensation. The ultrasonic probes adapt to most environmental conditions as their power and receiver sensitivity adjust automatically to any distance and reflecting object thus keeping the same echo amplitude over the operating range. Built in communication with PC allows storage of the current output and temperature in a data logger. The data logger is linked with the Microsoft Excel. The ultrasonic probes can be connected in network using RS485 with Intempco's protocol and Modbus RTU. In connection with a PC one can have a full diagnostic (loss of echo, temperature sensor failure, noise error, etc.). A user can also see on the computer screen the echo profiles and echo stability chart. Through the communications some parameters can be changed and also a fix point and programmable calibrations can be done.

## Applications

- *Food and beverages*
- *Water / Wastewater*
- *Chemicals*
- *Oils*
- *Solids and powders: grain, potash, cement, plastic pellets and many others*

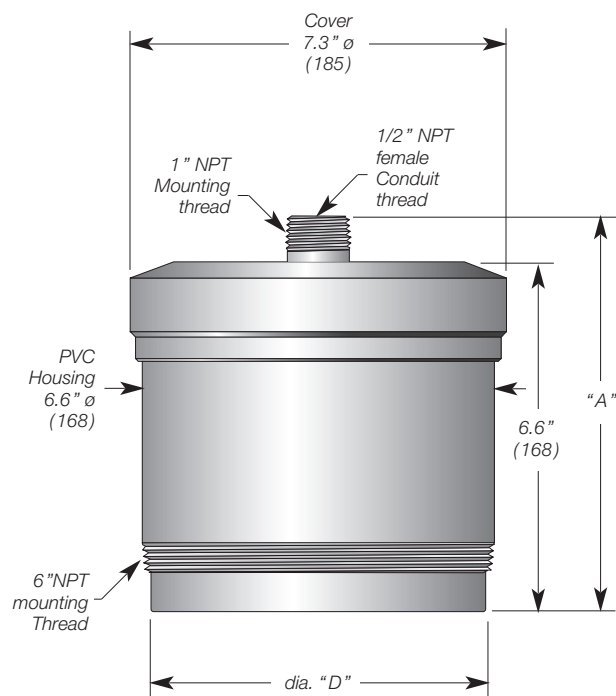


## Electrical Specifications

<b>Supply Voltage :</b>	<b>AC :</b> 115 VAC 60Hz or 230 VAC 50 Hz (± 20 %), 1.7VA
	<b>DC :</b> 12 to 30 VDC, 0.07 A max. @24VDC Rload = (Vs - 6) / 24mA
<b>Output :</b>	4-20mA output 6.1 uA resolution
<b>Maximum loop res.:</b>	750 ohms (Isolated on 4 wire only)
<b>Communication :</b>	Optional RS232 or RS485 communications port
<b>Accuracy :</b>	± 0.25% of max. target range (in air)
<b>Beam angle :</b>	6-12 degrees at -3 dB
<b>Loss of ech hold :</b>	30 secondes, 22 mA output
<b>Temp. compensation :</b>	In transducer
<b>Ambient Temperature :</b>	-40 to 60 °C (-40 to 140 °F)
<b>Calibration:</b>	Push-button or programmable via optional communication port.
<b>Temp. compensation :</b>	In transducer
<b>Diagnostics :</b>	Via communications port.

## Mechanical Specifications

<b>Enclosures</b>	PVC-94V0
<b>Conduit entry :</b>	1/2" NPT hole (PVC conduit only)
<b>Mounting thread :</b>	6" NPT on face, 1" NPT on cover
<b>Pressure :</b>	1 bar
<b>Ingress protection :</b>	NEMA 4X (IP65)



Model	Range	Resolution	Operating Frequency	Dimension "A"	Dimension "B"	Dimension "D"
LTU10	1.4 - 90 ft (0.40 - 27.4m)	0.41" (10mm)	25 KHz	7.62" (193mm)	N/A	5.75" (146mm)

## Ordering Information :

MODEL    BOX1    BOX2    BOX3  
**LTU10** -  -  -

BOX1 CODE	Supply Voltage
<b>AC</b>	115 VAC 60Hz or 230 VAC 50 Hz (± 20%), 1.7VA. 4-wire
<b>DC</b>	12 to 30 VDC, 0.07 A max. @ 24 VDC, 3-wire

BOX2 CODE	Mounting Thread
<b>P16P</b>	1" NPT / 6" NPT

BOX3 CODE	Options
<b>2</b>	RS232
<b>4</b>	RS485
<b>0</b>	None