Ultrasonic Level Transmitter

NIVOSON
MLU 860

Features

- 2 Wire Loop Powered
- Narrow Beam Angle of only 5 deg
- Built-in Temperature Compensation
- Level, Volume and Flow Measurement
- Optional Integrated Display
- 32 bit linearization function

Ultrasonic Level Transmitter

The Ultrasonic Level Transmitter offers non-contact measurement of level of liquids stored in tanks. As the instrument does not come in contact with the liquid, it is not affected by the chemical properties of the same such as corrosiveness and aggressiveness. In addition to level measurement, the instrument also offers distance, volume and open channel flow measurement.

The instrument works on the principle of transmission of ultrasonic waves in air. A pulse is transmitted from the sensor face into the tank. This pulse travels through the air, gets reflected by the liquid surface and returns back to the sensor. The on board electronics measures this total travel time of the pulse and the liquid level is computed.

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2 Wire Loop Powered
Low Power Consumption and Simplified Cabling

Narrow Beam Angle of only 5 deg
Suitable for Narrow tanks

Built-in Temperature Compensation
Time of flight correction and greater accuracy over the entire range

Level, Volume and Flow Measurement
Single instrument to meet diverse applications

Optional Integrated Display
Displays the level in user selectable units and provides bar graph indication.

32 bit linearization function
Allows volume and flow measurement in non-standard devices

Technical Specifications

Power Supply	: 18 - 36 Vdc
Outputs	: 4-20 mA (2 wire loop powered)
Display	: Backlit LCD (optional)
Measuring Range	: 6, 10 and 15 mtrs
Blanking Distance	: 0.25m, 0.35m, 0.45m
Process Connection	: Thread or Flanged
Transducer Material	: PP and PVDF
Beam Angle	: 5 deg.
Accuracy	: 0.15% of measured distance + 0.08% of range
Process Temperature	: - 30 deg C to +90 deg C
Process Pressure	: 3 bar Maximum
Housing	: Cast Aluminum
Protection	: IP68 for Sensor IP67 for Electronics

Parameters

The NIVOSON can be used for the measurement of wide range of Parameters such as

- **Distance Measurement**

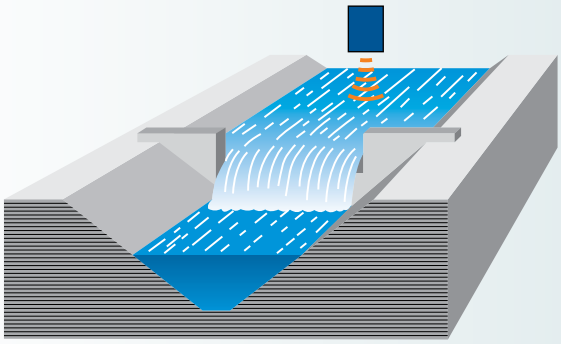
- **Level Measurement**
  - In closed tanks and open containers.
  - In applications where the sound velocity is not known, the 32 bit linearization function can be used for accurate level measurement.

- **Volume measurement**
  - With a database of 10 Pre-programmed Tank shapes, the instrument can be used to calculate the volume of the liquid in the tank.
  - The 32 bit linearization function gives the instrument the flexibility to calculate the volume in all tank shapes.

- **Flow Measurement**
  - Suitable for open channel flow measurement with calculations based on 20 pre-programmed flume and weir formulas
    - Parshall Flume
    - Venturi Flume
    - Weirs
    - 32 bit linerisation for any flume with unknown level and flow relation
  - The instrument offers 2 Flow totalizers for volumetric flow measurement. One of the totalizers is resettable while the other is not.

Salient Features

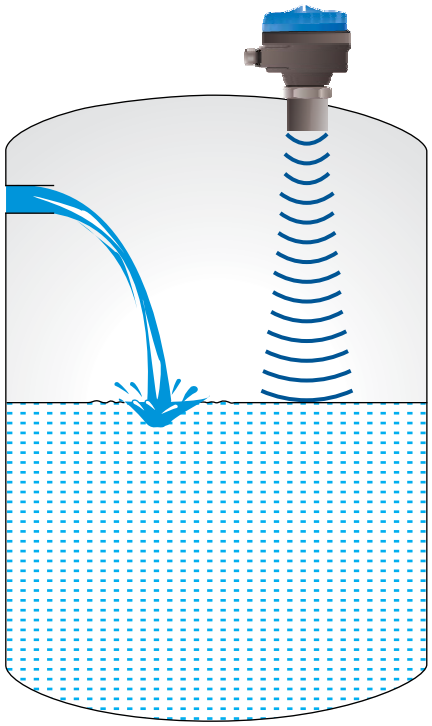
- Self Diagnostics
- Service and Test Parameters
- Password Protection
- Temperature Monitoring
- Fixed Target Supression



Nivo Ultrasonic Level Transmitter provides trouble free sensing of

- Raw Water
- Heavy Water
- Chilled Water
- Effluent
- Sewage
- Oil
- Sugar Syrup
- Beverages
- Juices
- Acids
- Alkalies

And many more!



We reserve the right to modify the technical data without prior notice.

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