

Features

- Accuracy of ± 0.25 F.S.
- Resolution greater of 3mm or 0.1% F.S.
- Ranges from 0-5m to 0-30m
- Small dead zone (blind zone) 0.25m to 0.6m
- Output types: 4-20mA, 0-5V, 1-5V, RS485
- Optional Programmable Relay Outputs: 1-2
- Power Supply: 2 wire loop powered 24VDC, 3 wire and 4 wire 230VAC, 24VDC or 12VDC. For mains, DC power supply, battery or solar supply.
- Built in advanced digital LCD display.
- Key pad programmable, with simple setup parameters.
- Robust, reliable and easy to operate. Tough powder coated cast aluminium, UV resistant and built to withstand harsh conditions.
- Intelligent signal processing and automatic temperature compensation.
- Process Temp range from -20 to 80°C.
- Process connection: 2Bar, M60 OR 2" BSP (enquire for other options).
- IP66, ABS plastic Housing.
- Over current and overvoltage protection.
- CE Certification



Applications

- Liquid Level measurement
- Water, oil or corrosive liquids
- Can be factory tuned for solids measurement
- Bulk solids, grain, animal feed, pellets, plastics
- Non-contact level or distance measurement
- Tank or silo level monitoring
- Pond or dam level monitoring
- Process industries and mining
- Water and Wastewater treatment, irrigation, agriculture

Description

The DAYTECH SONIC-4000 Series Tough Ultrasonic Level Transmitter is designed for reliable, simple and robust performance. The ultrasonic sensors are ideal for liquids or solids level measurement applications. The series is widely used in pond, dam, well or tank level measurement for water treatment, pumping stations, irrigation, process and environmental applications with proven performance. The transmitter can be factory tuned for measuring bulk solids, presenting a robust solution for silo, hopper or bin level measurement applications.

Standard features include advanced LCD display, automatic temperature compensation, over current and over voltage protection, small blind zone, level or distance measurement.

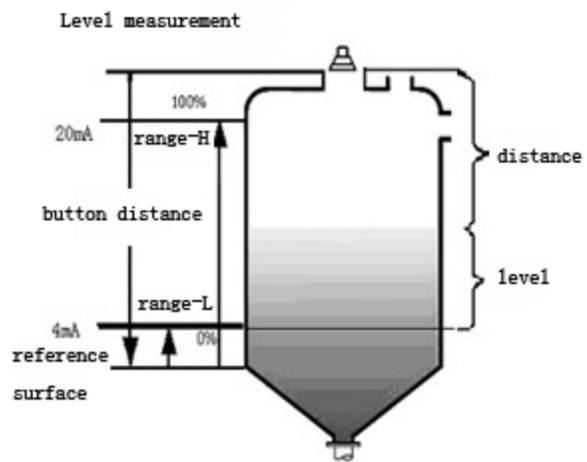
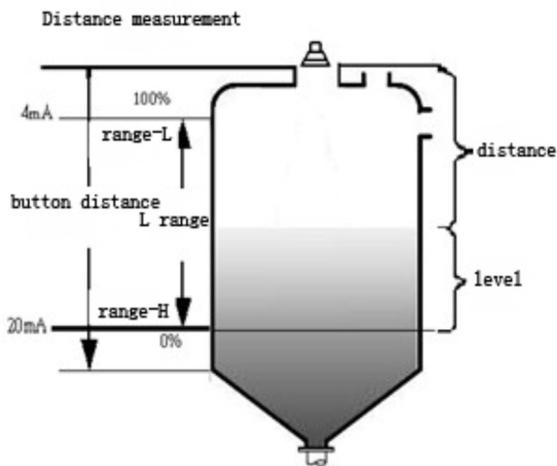
These ultrasonic level sensors have advanced features, however they are remarkably simple to setup and operate. With its intuitive user interface, your level sensing application will be reliably up and running in no time.

Display and Set Up

- Simple installation, 4 wire with 24VDC, 4-20ma. Optionally up to 2 programmable relay outputs.
- Simple set up by programming using push buttons.
- Tuning parameters are intuitive and easy to use, including analogue output scaling, distance or level measurement, ultrasonic pulse damping, sample speed, sensitivity and threshold. Simply follow the manual.
- Digital display shows the Level or Distance.
- Display shows status of the optional 2 relay outputs.
- Display shows the status of the sonic signal.
- User can scroll through the sensor status readings, Distance/Level, 4-20mA.
- Can be password protected for locking the configuration.



Distance or Level Measurement Example



DAYTECH SONIC-4000 Series Datasheet

Tough Ultrasonic Level Transmitters



Technical Specifications

Parameter	Value				Notes
Measurement Range	0-5m, 0-10m, 0-15m, 0-20m, 0-30m				
Operating Pressure	Process: 2 Bar Display Unit: atmospheric pressure				
Blind Zone	0.25m to 0.6m				
Accuracy	Optional $\pm 0.5\%$ F.S, $\pm 0.25\%$ F.S				
Resolution	Greater of 3mm or 0.1%F.S.				
Ambient Conditions	Temperature: $-10^{\circ}\text{C}\sim 60^{\circ}\text{C}$ Humidity: $\leq 90\%$ RH				
Process Temperature	$-20^{\circ}\text{C}\sim 80^{\circ}\text{C}$				
Automatic temperature compensation	$-10^{\circ}\text{C}\sim 60^{\circ}\text{C}$				
LCD Display	Level measurement, distance measurement, transmission value, ambient temperature, echo state, alarm display, algorithm selection.				
IP Rating	IP66				
Media Compatibility	Medium compatible with ABS plastic, refer chemical compatibility chart. Non-corrosive gases. Options: Optional corrosion resistant probe				
Wires	Two-wire	Three -wire		Four-wire	
Output Signal	4-20mA	0/1-5Vdc	0-10Vdc	4-20mA	
Power Supply 230VAC/24VDC supply or 12VDC supply for solar or battery applications	12VDC or 24VDC	12VDC or 24VDC	12VDC or 24VDC	12VDC or 24VDC or 230VAC	
Load resistance	750 Ω			250 Ω	
Load current	120mA				
Relay /Alarm Output:	Optional 1-2 of AC 250V/ 8A; DC 30V/ 5A; State programmable (optional for 4 wire only).				
Communication	RS232 / RS485 Communications (optional)				
Electrical Connection	2 x M20 IP66 glands for cable connection				
Process Connection	2Bar, M60 OR 2" BSP (enquire for other options)				
Compliance Certification	CE, complies with AUS/NZ standards				
IP Rating	IP66				
Beam Angle	5 degrees for 0-5m and 0-10m 3 degrees for 0-15m, 0-20m, 0-30m				

Selection Guide

Please contact our sales and engineering team for application assistance.

Daytech Pty Ltd

Measurement and Control Technology for the Process and Environmental Industries.

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