Measurement & Analytics | **LST300**

LST300 compact ultrasonic level transmitter
Level measurement made easy

Power and productivity
for a better world™

The most powerful ultrasonic level transmitter in a compact form

LST300 represents the future of level measurement. Today's plants demand low power, easy to use instruments that deliver great performance even in difficult conditions. Intelligent compact transmitters have always been attractive, but certain limitations previously prevented their use in many applications.

Let us introduce LST300 from ABB – the device that removes the need for compromise on accuracy, power consumption, ingress protection, chemical resistance, HMI capabilities or measurement range. LST300 is the first to offer the benefits of remote devices in a compact instrument.

Whether used in municipal water applications or industrial processes, LST300 delivers enhanced reliability and performance, reducing the cost of ownership and delivering operational benefits.

A powerful low power device
With the most advanced technology in electronics, LST300 allows you to perform measurements and add features that required 4-wire power in the past. The new LST300 measures up to 10 m range while powering a graphic HMI, and still manages to function using only loop power without any special requirements.

Automatically adapts to process conditions
The LST300 takes the already powerful GAP technology of the LST400. The LST300 constantly monitors measurement data, optimizing the system for the best signal to noise at any tank size. This function ensures the LST300 always runs at its highest accuracy. The LST300 is easy to install in both small areas like stilling wells, and large tanks in difficult conditions.

Graphic echo display and full diagnostics

LST300 is the first to have full graphic capability and allows you to visualize the process on the instrument, while other compact instruments have simple character display systems only. Detailed tracking of signal quality, noise levels and many other important diagnostics make LST300 the easiest level transmitter to install.

Survives harsh chemical environments

Metal at the top, and PVDF at the bottom. LST300 is the first instrument that can be installed in the rough, corrosive conditions where only remote sensor instruments were typically used. All other compact ultrasonic instruments provide corrosion resistance only on the sensor, and requires you to separate the transmitter from the corrosive environment.

The IP66/67 rated LST300 has no problem surviving tough outdoor conditions and can be fully submerged during flood conditions. Many other devices in the market only provide high IP ratings on the sensor (wetted parts), while their main electronics have only IP65 protection. However, LST300 is an integrated, yet fully protected device and its IP rating applies to the whole of the instrument.

LST300	
Measurement range	0.25 to 6 m (10 to 20 ft) 0.35 to 10 m (14 to 32 ft)
Beam angle (@ -3dB, half angle)	7° (1 to 20 ft version) / 5° (1 to 30 ft version)
Output options	Two-wire analog 4 to 20 mA output with HART digital communication
Power	16 to 42 VDC
Accuracy	±2 mm (0.08") or 0.25 % of full span (the larger one)
Repeatability	±0.2 % of measurement range
Approvals	**Non incendive:** cFMus: CL 1/DIV 2 CL II/ DIV 2 Zone 2 ATEX/IECEx: II 3 G Exna, II 3 D Exna **Intrinsic Safety:** cFMus: CL 1/DIV 1 CL II/ DIV 1 Zone 0 ATEX/IECEx: II 1 G Exia, II 1 D Exia
Enclosure	IP66/67 or NEMA 4X, PVDF and aluminum alloy
Temperature range	-40 to 85 °C (-40 to 185 °F)
Pressure	Measurement functional from -4 to 44 psi (-0.25 to 3.0 bar)

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Sales

Service

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