

# Ultrasonic Level Monitoring System



WESS LEV-100 ultrasonic level meter utilizes enhanced ultrasonic technology to measure liquid or solid level in various applications with superior accuracy and reliability. The instrument continuously provides the user with important information which includes numeric & graphic screens representing the distance to medium level, an echo profile image to ensure correct configuration during commissioning and saved data analysis for maximum 400days.

LEV100 series offer two types of controllers and various types of sensors to suit for most field requirements. Its isolated electric design enables fit-and-forget performance.

## Product Features

- Continuous Measurement
- Single or Dual channel measurement
- Max 400 days Data Logging & Trend Mode
- Various types of sensors
- ASF(Automatic Signal Filter)
- Narrow ultrasonic beam angle (4 degree)
- Current isolation

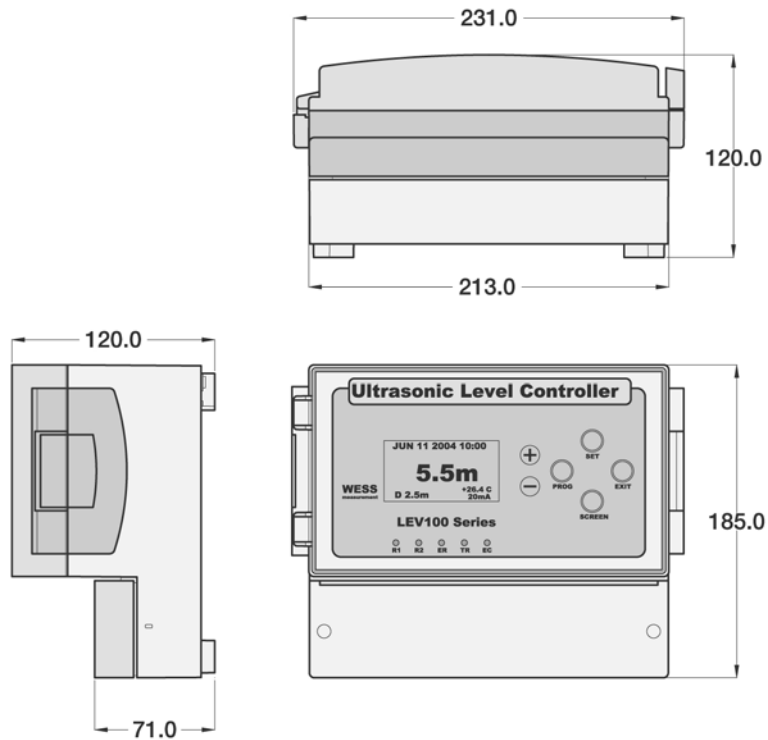
## Applicable Industries

- Water and Waste water
- Petrochemical
- Refinery
- Food & Beverage
- Nuclear Power Plant

## Product Dimensions

### Controller

*LEV100-S/D*

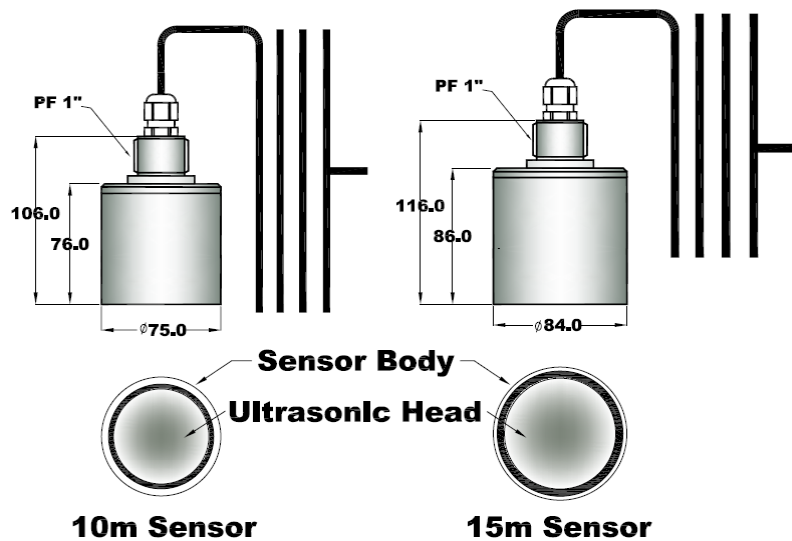


### Sensor

*S4-10 Series*

*S4-15 Series*

**Cable : 10m or 33ft(STD.)**



**Product Specifications****Controllers**

We offer two different types of controllers, LEV100-S and LEV100-D. The LEV100-D controller operates with two sensors measuring differential level as well as respective level measurements

***LEV100-S***

<b>Measuring Ranges</b>	0 ~ 10m, 0~15m
<b>Resolution</b>	1mm
<b>Accuracy</b>	+/- 0.25% of measured range
<b>Measuring Pulse</b>	5~25times/sec
<b>Display</b>	Graphic LCD (Level, Distance, Temperature, Echo Amp, Time, Current Output, Trend)

**Operational Temperature**    -20 ~ 70°C

**Outputs**

Current Output : 4~20mA, nom. Load 250Ω (load range : 100 ~ 750Ω)

Relay Output : 3 SPDT(5A, 250VAC)

Digital Output : Optional RS232C or RS485(Optional)

**Power Supply**

Standard : 100 ~ 240V AC, 50~60Hz, ≤6W

Option : 20~30V DC

<b>Enclosure Material</b>	Body: ABS Window : Polycarbonate
<b>Sensor Control</b>	1 Point
<b>Dimension</b>	231(W) x 185(L) x 120(H)mm
<b>Weight</b>	1 kg
<b>IP Rating</b>	IP65
<b>Data Saving</b>	Maximum 400 days Data logging & Trend
<b>Screen</b>	Numeric, Echo Profile, Trend Screen
<b>Certificate</b>	CE

**Controllers*****LEV100-D (Controller-1, Sensor-2)***

<b>Measuring Ranges</b>	0 ~ 10m, 0~15m
<b>Resolution</b>	1mm
<b>Accuracy</b>	+/- 0.25% of measured range
<b>Measuring Pulse</b>	5~25times/sec
<b>Display</b>	Graphic LCD Level(Differential Level), Distance, Temperature, mA, Present Time
<b>Operational Temperature</b>	-20 ~ 70°C

**Outputs**

Current Output : 2 EA X 4~20mA, nom. Load 250Ω (load range : 100 ~ 750Ω)

Relay Output : 1 SPDT(5A, 250VAC)

Digital Output : Optional RS232C or RS485

**Power Supply**

Standard : 100 ~ 240V AC, 50~60Hz, ≤6W

Option : 20~30V DC

<b>Enclosure Material</b>	Body : ABS Window : Polycarbonate
<b>Sensor Control</b>	2 Points
<b>Dimension</b>	235(L) x 185(W) x 119(H)mm
<b>Weight</b>	1 kg
<b>IP Rating</b>	IP65
<b>Data Saving</b>	Maximum 400 days Data logging & Trend
<b>Screens</b>	Numeric, Echo Profile, Data Trend
<b>Certificate</b>	CE(Pending)

## **Sensors**

We offer two different ranges of sensors, 10m and 15m. The two sensors also have several types of sensor materials, Teflon, PVC and Stainless Steel.

### ***S4-10 Series***

<b>Range</b>	0 ~ 10m
<b>Dead Zone</b>	30cm
<b>Material</b>	
S4-10P	Sensor Body: Clean PVC, Ultrasonic Head: Teflon facing
S4-10S	Sensor Body & Head: S.S.316
S4-10T	Sensor Body & Head: Teflon
<b>Mounting Thread</b>	1" PF Thread
<b>Cable Length</b>	10m(33ft)Standard Max. 100m extensible on request
<b>Operational Temperature</b>	-20 ~ 70°C
<b>Beam Angle</b>	4 degree
<b>Frequency</b>	53KHz
<b>Weight</b>	0.7kg (PVC, Teflon), 1.2kg(S.S.316)
<b>IP Rating</b>	IP68

### ***S4-15 Series***

<b>Range</b>	0 ~ 15m(include dead zone)
<b>Dead Zone</b>	50cm
<b>Material</b>	
S4-15P	Sensor Body: Clean PVC, Ultrasonic Head: Teflon facing
S4-15S	Sensor Body & Head: S.S.316
S4-15T	Sensor Body & Head: Teflon
<b>Mounting Thread</b>	1" PF Thread
<b>Cable Length</b>	10m(33ft)Standard Max. 100m extensible on request
<b>Beam Angle</b>	4 degree
<b>Frequency</b>	47KHz
<b>Weight</b>	1.0g (PVC, Teflon), 1.5kg(S.S.316)
<b>IP Rating</b>	IP68

**Ordering Code****LEV-100 Ultrasonic Level Meter**

LEV-100	CODE	DESCRIPTION
<b>Controller</b>	C4S	One-sensor measurement , AC100~240V
	C4SD	DC 20~30V
	C4D	Two-sensor measurement, AC100~240V
	C4DD	DC 20~30V
<b>Sensor</b>	S410P	10meter, C-PVC(Teflon facing)
	S410T	10meter, All Teflon
	S415P	15meter, C-PVC(Teflon facing)
	S415T	15meter, All Teflon
	S430P	30meter, C-PVC(Teflon facing)
	S430T	30meter, All Teflon
<b>Option</b>	C4_XXm	Additional cable extension in meters
	RSC	RS-232 Download cable
	PRO	PROFIBUS-DP
	R44	RS-485 ( RS232 is provided as standard)
<b>NOTES*</b>	*EX) C4D-S40P-C_5m Dual channel controller(220V) with 10m C-PVC sensor with additional 5m cable	