

Ultrasonic Sludge Blanket Monitoring System



WESS ENV-100 sludge blanket level meter utilizes its specialized ultrasonic technology to measure sludge interface level in various types of clarifiers, settling tanks, and thickeners. The ENV-100 offers useful information by numeric & graphic screens, such as range of blanket level, echo profile image, and saved data analysis etc. By adopting VTA(Visual Threshold Adjustment) and ASF(Abnormal Signal Filter) functions, user can overcome harsh field conditions. Its built-in probe cleaning nozzle makes automatic probe cleaning efficiently with no additional cost and the swing bracket helps to protect the probe from skimmer travels.

Benefits

Reducing pumping costs

Minimize the manual measurement

Automatic tank de-sludging

Product Features

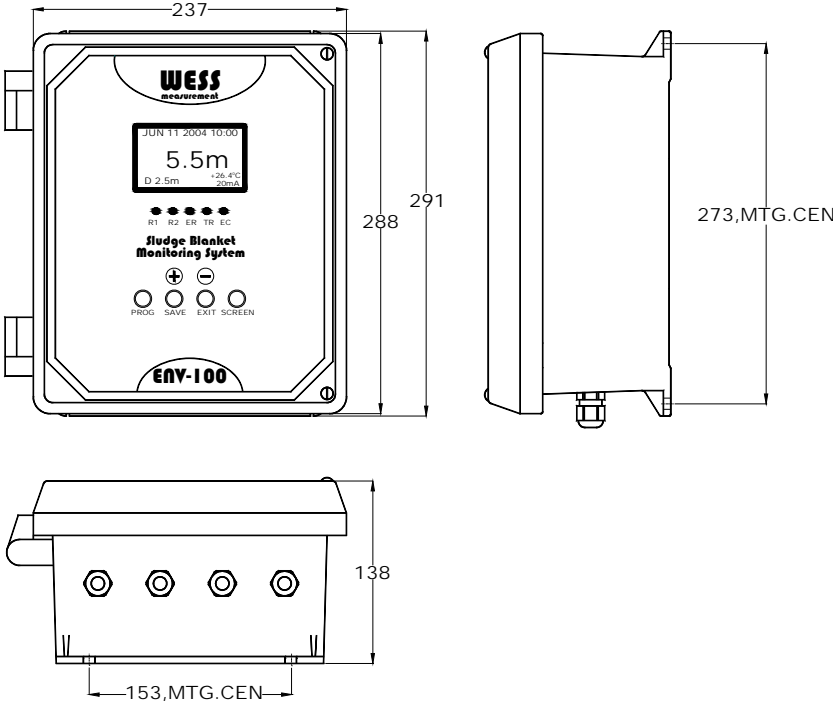
- Continuous Measurement
- Single or Multi point measurement
- 10,000 points Data Logging & Trend Mode
- Long range measurement up to 20m
- Visual Threshold Adjustment(VTA)
- Optional Probe Cleaning Device
- Optional Swing Bracket for skimmer avoidance
- ASF(Automatic Signal Filter)

Applications

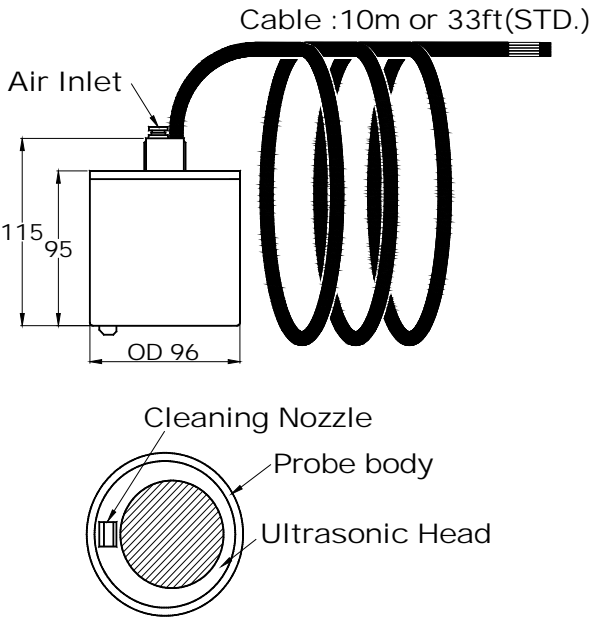
- Primary & Secondary Clarifier
- Gravity Thickener
- Mining Clarifiers
- Circular Rotating or Static clarifiers
- Lamella Clarifiers
- Brine Tanks

Product Dimensions

Controller



Probe



Product Specifications

Electronic

Measuring Ranges	0.35 ~ 10m(1~33ft), 20m(option)
Resolution	1cm(metric units), 0.1ft(UK units)
Accuracy	+/- 0.5% of measured range or 1 inch, whichever is greater
Operational Temperature	-10 ~ 60°C(14~140°F)

Outputs

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

Relay Output : 3 SPDT(5A, 250VAC) – “ER” “R1” “R2”

Digital Output : RS232C(Standard), RS485 or Profibus-DP(option)

Power Supply

Standard : 86 ~ 260V AC, 50~60Hz, ≤15W

Option : 24V DC ± 10%

Enclosure Material	Body/Cover : FRP Window : Polycarbonate
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Dimension	W 237 x H 291 x D 138mm
Mounting	Hole center W 153 x H 273 mm(Ø 8.2 x 4ea)
Weight	3 kg
IP Rating	IP67

Visual Threshold Adjustment

ASF(Abnormal Signal Filtering)

Certificate	CE, NRTL(Pending)
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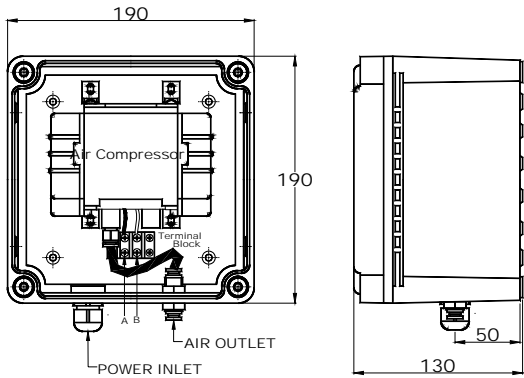
Probe

Material	Probe body : S.S. 316 or PVC Ultrasonic Head : Grey PVC
Mounting Thread	3/4" NPT Thread
Cable Length	10m(33ft)Standard Max. 100m extensible on request
Operational Temperature	-30 ~ 70°C(-22 ~ 158°F)
Beam Angle	8 degree
Frequency	600kHz
Weight	2kg(PVC body), 2.5kg(S.S. body)
IP Rating	IP68
Cleaning Method	Air jet (built-in cleaning nozzle)

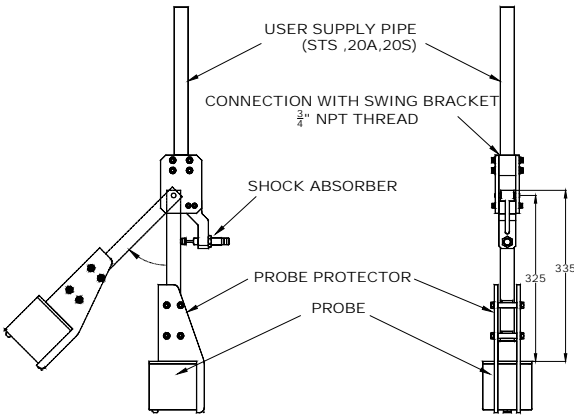
Optional Devices

The probe cleaning device is needed when applying to harsh and dirty applications and swing bracket is used where skimmer travels. The cleaning device is recommended for fit-and-forget operation

Probe Cleaning Device



Swing Bracket



Ordering Code

Control Device C1 - ● ● ●

Probe & Option S1- ● ● ● ● ●

	Power Requirement	
A	AC86-260V	
D	DC24V	
	Measuring Points	
1	Single	
2	Dual	
	Communication	
2	RS232 Standard	
4	RS485	
P	PROFIBUS	
C1 -	<input type="checkbox"/>	<input type="checkbox"/>

	Housing Material	
S	Stainless Steel 316	
P	PVC	
	Cable Length	
S	Standard 10m(33ft)	
***	Type total length required	
	Cable Length Unit	
F	Feet	
M	Meters	
	Probe Cleaning Device(PCD)	
X	Without PCD	
O	With PCD	
	Swing Bracket(SB)	
X	Without SB	
O	With SB	
S1 -	<input type="checkbox"/>	<input type="checkbox"/>