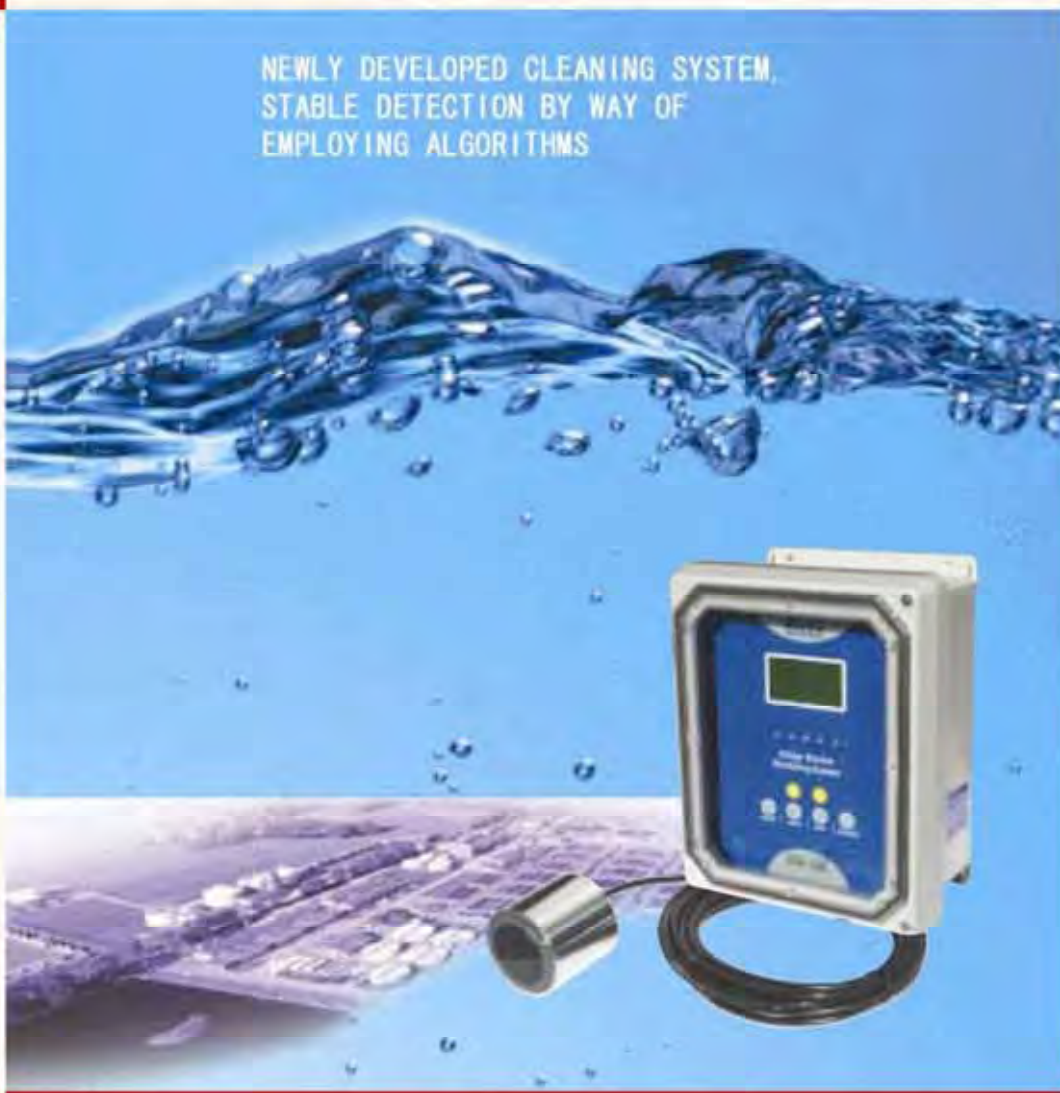


# ENV100 SERIES

ULTRASONIC SLUDGE BLANKET LEVEL METER

NEWLY DEVELOPED CLEANING SYSTEM,  
STABLE DETECTION BY WAY OF  
EMPLOYING ALGORITHMS



## ENV100 SERIES ULTRASONIC LEVEL METER FOR SUBMERGED SLUDGE

### SOPHISTICATED METER MEASURING LEVEL FOR SUBMERGED SLUDGE!!

The model of ENV100 is a high precision meter measuring the level of submersible sludge, to which the most updated technology of ultrasonic measurement is applied. The housing is waterproof and its rating is IP68. The automatic cleaning system prevents the sensor surface from being fouled. The algorithm that is developed based on our abundant experience can avoid noises caused by an agitator and so on, for which it can detect the indistinct sludge-blanket in a digestion tank, a thickener and others. And yet it excels in a good maintenance and a high reliability.

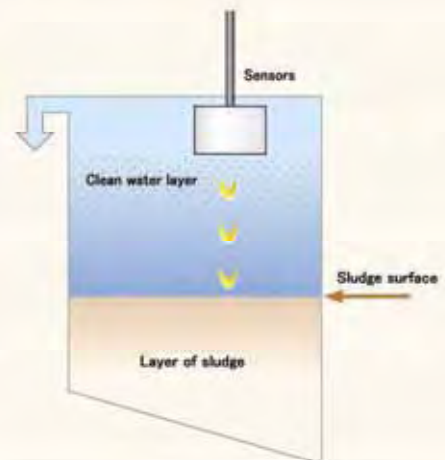


#### ■ FEATURES

- It can continuously measure in a real time.
- An economical version that can connect 4 sensors is available
- It builds in a logger that can store data for 400 days at the maximum.
- An optional model of wireless system can save wiring cost.
- The automatic cleaning system succeed in reducing a great deal of maintenance works.

#### ■ APPLICATION

- Waste-water Treatment Facility (Primary & Secondary Purifier Equipment, Condensation/Sedimentation Equipment)
- Water Purifying Facility
- Power Plant (Desulfurization Equipment)
- Petro-chemistry, Sludge Purification Tank



#### ■ Merits of Sludge level-meter

- Reduction of pump operating cost: it can conserve energy by the pump operation in response to real level other than the scheduled operation.
- It can optimize the heating-energy conservation by appropriately controlling the removal-level of the sludge in the decomposition layer.
- It can alleviate load on downstream processes through sludge-level real time measurements in the first step treatment tank.
- The efficiency is upgraded because consistent and smooth operation of overall treatment facility is attained.
- Optimized operation meeting variations of disposal amount required makes the running cost lower.

## SPECIFICATION

<b>CONTROLLER</b>			
Application	Single Type	Multiple Type	Portable Type
Type	ENV100S	ENV100 - M	ENV100 - P
Range	0 – 10m	0 – 10m	0 – 10m
Resolution	1cm	1cm	1cm
Accuracy	± 0.5% or 2.5cm	± 0.5% or 2.5cm	± 0.5% or 2.5cm
Temperature	-10 – 60	-10 – 60	-10 – 60
Nbr of Sensor	1	4 at the maximum	1
Data Storage	400 days at the maximum	400 days at the maximum	Depend on setting
Display	Value, Echo, Trend Level, Distance, Temper. mA, Echo, Time	Value, Echo, Trend Level, Distance, Temper. mA, Echo, Time	Value, Echo, Trend Level, Distance, Temper. mA, Echo, Time
Output	4-20mA 250 maximum 3SPDT (5A 250VAC) RS232C (Standard) RS485, Profibu-DP	4-20mA 250 maximum 3SPDT (5A 250VAC) RS232C (Standard) RS485, Profibu-DP	PS232c
Power	100 – 240VAC 50/60Hz 20 – 30VDC Option	100 – 240VAC 50/60Hz 20 – 30VDC Option	Rechargeable battery
Power Consumption	Below 8W	Below 6W	
Housing Material	Main body: FRP Window: Polycarbonate	Main body: FRP Window: Polycarbonate	Aluminum
Weight	3.0kg	3.2kg	1.5kg
Housing Rating	IP67	IP67	IP65
Certificate	CE	CE	CE
<b>Sensor</b>			
Type	SI-G	SI-P	SI-H
Material	Main Body: SUS316 Transmitting face: grey PVC + epoxy	Main Body: Clear PVC Transmitting face: epoxy	Sensor::SUS316 Transmitting face: Teflon Terminal box: aluminum die-cast
Cleaning	built-in nozzle	N/A	
Connection	3/4" NPT	N/A	Advance arrangement
Cable Length	10m(standard), 300m max	5m	10m(standard), 300m at the maximum
Temperature	-10 – 60	-10 – 60	-1 – 100
Beam Angle	5 °	5 °	5 °
Frequency	160kHz	160kHz	160kHz
Weight	3kg (include cable in 10m)	700g(include cable in 5m)	4kg(include terminal box)
Housing Rating	IP68	IP68	IP68
Distance between Sensor & Terminal box			350mm (standard) Can extend on request.



ENV100-S/M



ENV100-P



SI-G



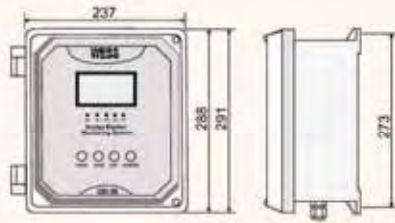
SI-P



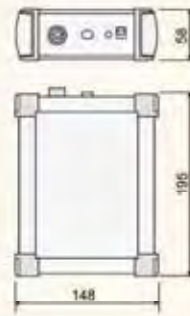
SI-H

## GENERAL DRAWINGS

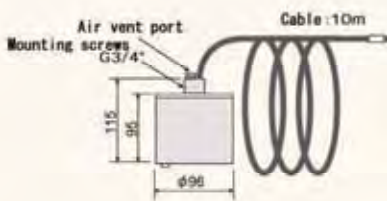
ENV100-S/M



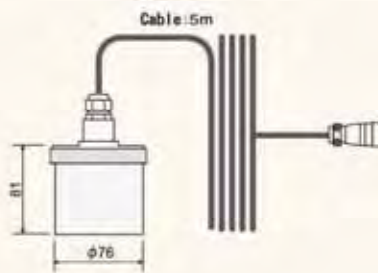
ENV100-P



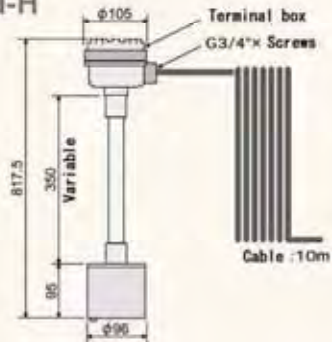
SI-G



SI-P



SI-H



## OPTION PRODUCTS



Cleaning Unit



Sensor / controller  
mounting kit



Swing blanket

### Line of business

- 回転式レベルスイッチ
- 振動式レベルスイッチ
- 磁子式レベルスイッチ
- 音波式レベルスイッチ
- 静電容量式レベルスイッチ
- 静電容量式近接センサ
- 静電容量式レベルメータ
- ダイアフラム式レベルスイッチ
- チルトスイッチ
- リーク式レベルスイッチ
- マイクロウェーブスイッチ
- サウンディング式レベルメータ
- フロースイッチ
- 電極式レベルスイッチ
- フロートスイッチ
- フロート式レベルメータ
- 超音波式レベルメータ
- コンベア周辺機器
- ガストモニタ
- ジルコニア酸素濃度計
- レーザー式レベルメータ
- 電波式レベルメータ
- 液体温度・濃度計
- 超音波流量計

\* Please be sure to read USER'S GUIDE, Installation & Operation Instructions when using the instrument.  
\* The specifications herein may be subject to change without advance notice

Nuclear Power Generation to Rice Milling  
All-round Manufacturer of Level Controllers for Powder, Granules and Liquid

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