



ULTRASONIC LEVEL METER

HD350

HD350-A / HD350-B

DSP model

Stable measurement by DSP

DSP Accurate measurement Graphic display in compact body



Compact one unit includes sensor and control circuit

Housing material is chemical-resistant resin, PP.

Rich information display by graphic LCD

Easy and straight forward operation by Menu driven mode control and data image display

Wide measurement range

HD350-A: 0.3 - 10 m (1 - 33 ft.)

HD350-B: 0.15 - 4 m (0.5 - 13 ft.)

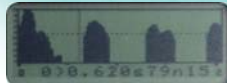
Reduced dead zone distance than conventional model

Four display mode

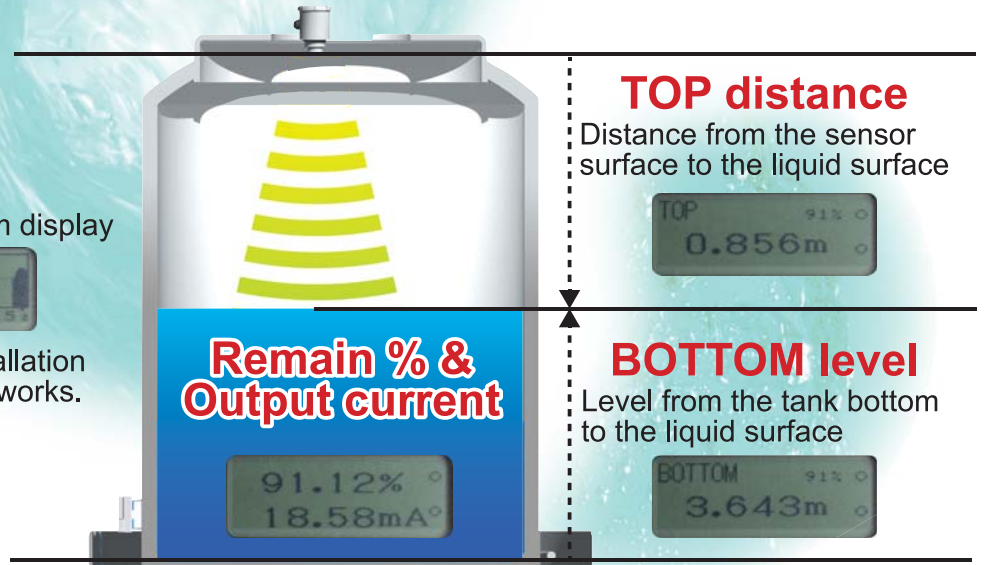
Display mode can be selected from 4 display modes.

A-mode

Refelected waveform display



Useful for the installation and maintenance works.



Specifications

- 1) RS-485 (MODBUS protocol)
- 2) 4-20 mA current output
- 3) Alarm sensors / points

Open channel flow measurement

Measures integrating or instantaneous flow of triangular, rectangular (with or without end contraction) or parshall flume.

Usage

- Level control of liquid, particulate level in a tank
- Level measurement of pond, lake or river
- Open channel flow measurement



■ Liquid level ■ Particulate level ■ Level control of a river

ULTRASONIC LEVEL METER

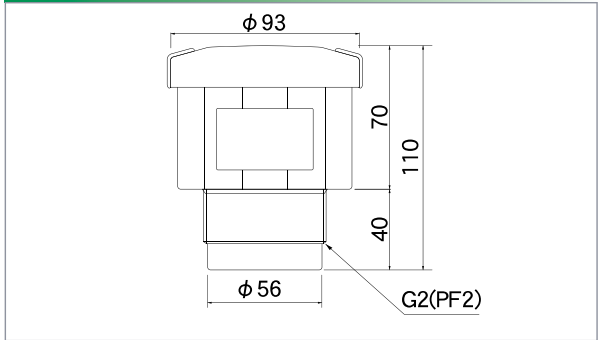
HD350

Specifications

Model		HD350-A	HD350-B
Channel		1 CH	
Frequency		50kHz	100 kHz
Measurement Object		liquid, powder, particulate	
Measurement range		0.3~10m	0.15~4m
Resolution		1 mm	
Accuracy		±0.25%F.S. (±2.5cm)	±0.25%F.S. (±1.0cm)
Data update cycle		0.5 sec	
Sensor directive angle (beam angle)		14°(-6dB) / 10° (-3dB)	
Power source	Voltage	DC12 - 24V	
	Power consumption	3W	
Display		Graphic LCD	
Output	Alarm output (contact point)	1 point each top/ bottom NPN open collector	
	4-20 mA current	Resolution: 12 bit (Max. load 500Ω 24V)	
Interface		RS-485 (max. distance:1200 m)	
Operation temperature		-20 to 70 deg C	
Material		PP	
Protection		IP65 level (without cap: IP20 level)	
Dimension		dia. 93 x 110 mm	
Cord length		10 m	
Weight		350 g	
Screw		G2	

●Option: 30 m cord

Dimensions



Notice for installation

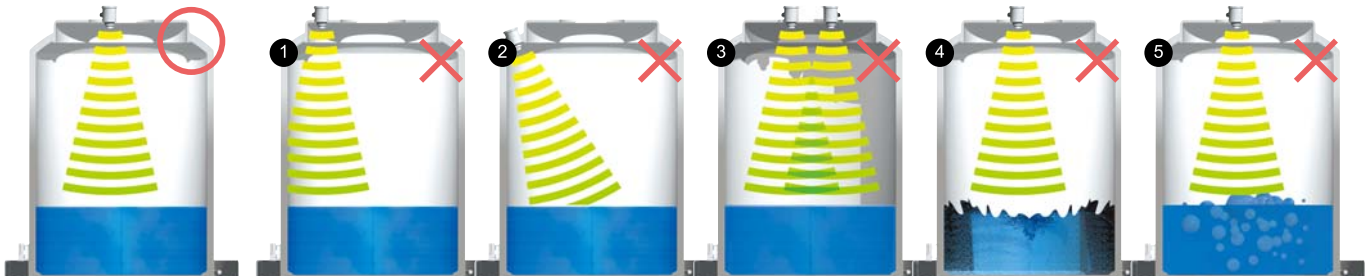
* Do not install the unit inside of a tube like below image



* Do not use metal nut or metal flange. It may cause error on measurement.

* Please use nut or flange that made of plastic.

Ultrasonic Level Meter - Notes on sensor installation



• Avoid obstacles

Make sure that no obstacles are interfered within the directivity angle of the sensor of the ultrasonic level meter. (1)

• Make sure the sensor position

Make sure the transmitting/receiving plane of the ultrasonic sensor is parallel to the object to be measured. Do not install a sensor in the center of a tank. (2, 4)

• Do not install more than one sensor

Multiple ultrasonic sensors in a tank will interfere with another one. (3)

• Avoid strong water movements or bubbles

Swirling water and bubbles might have bad effect on precise measurement. (4, 5)



HONDA ELECTRONICS CO.,LTD.

Headquarters: 20 Oyamazuka, Oiwa-cho, Toyohashi, Aichi 441-3193, Japan
Tel: +81-532-41-2511 (Main) Fax: +81-532-41-2093

Industrial Equipment Division: 20 Oyamazuka, Oiwa-cho, Toyohashi, Aichi 441-3193, Japan
Tel: +81-532-41-2774 (Direct) Fax: +81-532-41-2923

Bangkok Representative Office: Room 23, 2 Jasmine Bldg., 12 Fl., Soi Sukhumvit 23 (Prasanmitr),
Sukhumvit Rd., North Klongtoey, Wattana, Bangkok 10110
Tel: +66-2-612-7311 Fax: +66-2-612-7399

URL <http://www.honda-el.co.jp/en/>

Registered company for ISO9001 and ISO14001

<Contact>