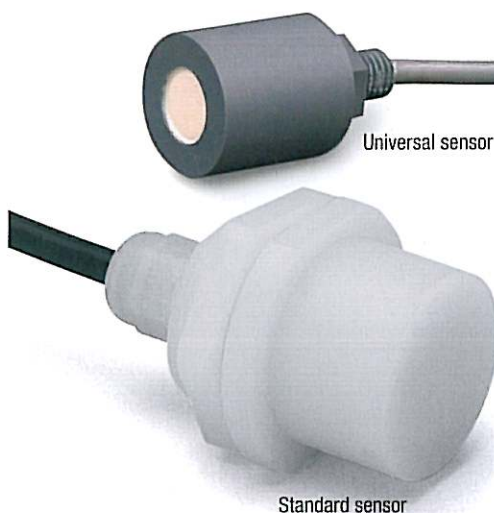


**Chemically-resistant plastic sensor (PFA)
 allows use with a wide range of chemicals.
 Accurately measures close-range
 distances.**



Product overview and features



The sensor transmits ultrasonic signals to an object or material — the surface of a liquid, for example — and receives the reflected signals. The meter then measures the elapsed time and calculates the distance.

- **Close-range measurement**
 High frequencies enable high-resolution distance detection for close-range measurements.
- **High resolution**
 Both display resolution and internal resolution are 0.1 mm.
- **Compact and lightweight**
 Compact sensor and main unit result in a small footprint.
- **Chemically-resistant sensor**
 The sensor body is composed of chemically-resistant plastic (PFA).
- **Various measurement output**
 RS-232-C, 4-20 mA current output, and alarm output contact are available and the meter is easily integrated into various systems.
- **Standard and universal sensors are available.**
 Select the sensor appropriate for the operating environment.

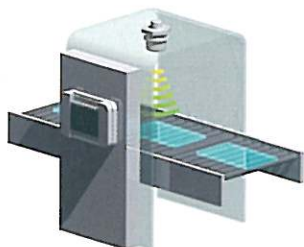
Applications and examples



- Liquid level management for small tanks
- Detection and positioning of workpieces on a production line



■ Liquid level management for small tanks



■ Detection of glass wafers

Standard specification



Model No.	HD500-C	HD500-D
Number of channels	1CH	1CH
Frequency	200 kHz	400 kHz
Object to be measured		Liquid
Measurement distance range	0.12 to 1.0 m	0.06 to 0.45 m
Resolution	Measurement	0.1 mm
	Display	0.1 mm
Accuracy	±0.25%F.S. (±0.25 cm)	±0.25%F.S. (±0.1 cm)
Data update cycle		0.05 sec.
Sensor directivity angle (beam angle)	10° (Universal: 14°)	5°
Power supply	Voltage	DC10 to 28 V
	Power consumption	3 W
Display		4-digit LED
Output	Alarm output	2 each for upper/lower DC 30V 0.1 A (NPN open collector)
	4-20 mA current output (maximum load resistance)	16 bit RL (MAX) = 450 Ω
Interface		RS-232-C (Max. transmission range: 10 m)

	Main unit	Sensor
Operating ambient temperatures	0 to 50 °C	Standard: 0 to 50 °C Type C universal: -20 to 60 °C
Material	ABS	Standard: PFA Type C universal: PVC
Protection standard	IP43	IP65
Dimensions (W x D x H)	113 x 52.5 x 94 mm	Standard: φ42 x 39 mm Type C universal: φ32 x 35 mm
Sensor cable length	—	Standard: 2 m Type C universal: 10 m
Maximum sensor cable length	—	2 m
Distribution cable length	Not supplied	—
Weight	300 g	Standard: 150 g Type C universal: 150 g
Sensor attachment screw	—	Standard: M32 P1.0 Type C universal: M12 P1.75

For details on materials, see the footnote on page 10.

Other

- The HD500-C provides weir flowmeter functions that enable flow rate measurements in a triangular weir.



■ Flow rate measurement in triangular weir