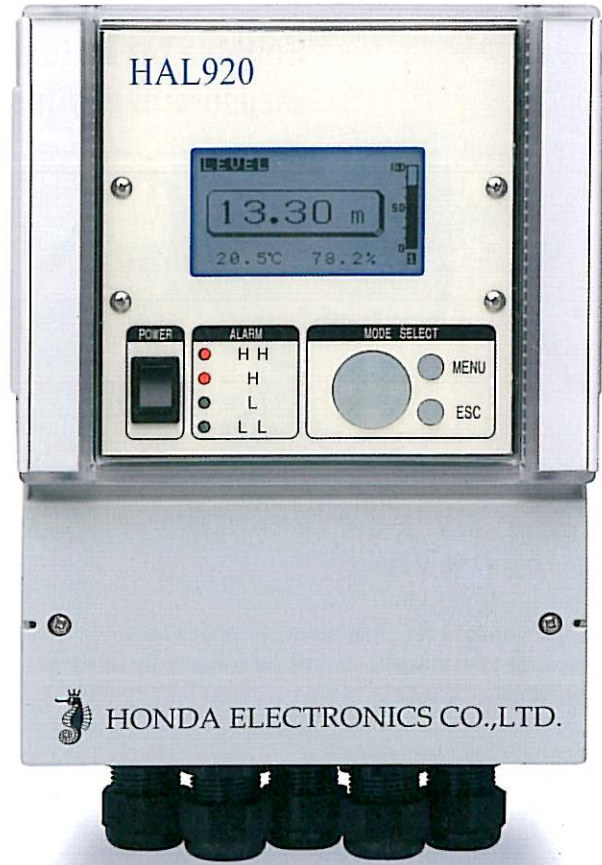


Ensures reliable measurements
across a wide range.



Product overview and features

High resolution
0.6 ~ 24

The sensor transmits ultrasonic signals to an object or material (liquid/powder) and receives the reflected signals. The meter then measures the elapsed time and calculates the distance.

- **Wide measurement range**
Measures a wide range of distances: from 0.6 to 24 m.
Ensures reliable measurements using the conical sensor.
- **Four alarm output lines**
Four alarm output lines are provided to enable various controls.
- **The standard equipment configuration includes RS-485**
The RS-485 is provided as part of the standard configuration to enable remote control at a distance of up to 1,200 m.
The MODBUS protocol is provided as part of the standard configuration, enabling communications with a PLC.
- **Signal processing to reduce noise**
The ultrasonic signals received are processed to reduce the effects of external noise and external ultrasonic waves.
- **Compact and lightweight**
Uses a conical sensor for compact dimensions and low weight.

Applications and examples



- Liquid/powder level management for a tank inside a machine
- Water level measurement for lakes, ponds, or rivers



Standard specification

Model No.		HAL920
Number of channels		1 CH
Frequency		21 kHz
Object to be measured		Liquid/powder
Measurement distance range (1/2 for powder)		0.6 to 24 m
Resolution	Measurement	1 mm
	Display	1 mm
Accuracy		±0.25%F.S. (±1cm)
Data update cycle		1.5 sec.
Sensor directivity angle (beam angle)		14°
Power supply	Voltage	AC85 to 264 V
	Power consumption	15 VA
Display		LCD (with backlight)
Output	Alarm output	4 lines AC250V, DC30V 5 A (Relay contact)
	4-20 mA current output (maximum load resistance)	16 bit RL (MAX) = 600 Ω
	Interface	RS-485 (Max. transmission range: 1,200 m)
		Main unit Sensor
Operating ambient temperatures		-20 to 60°C
Material	ABS	PVC and other
Protection standard	IP66	IP53
Dimensions (W x D x H)	185 x 85 x 235 mm	φ145 x 120 mm
Sensor cable length	—	5 m
Maximum sensor cable length	—	200 m
Distribution cable length	Not supplied	—
Weight	1.8 kg	290 g
Sensor attachment screw (old JIS)	—	G1 (PF1)

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

Option

- PROFIBUS communication converter

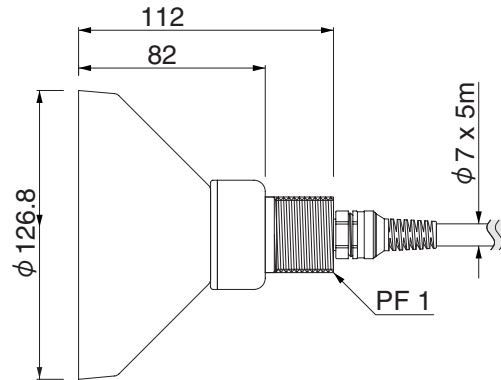
超音波レベル計

Ultrasonic Level Meter

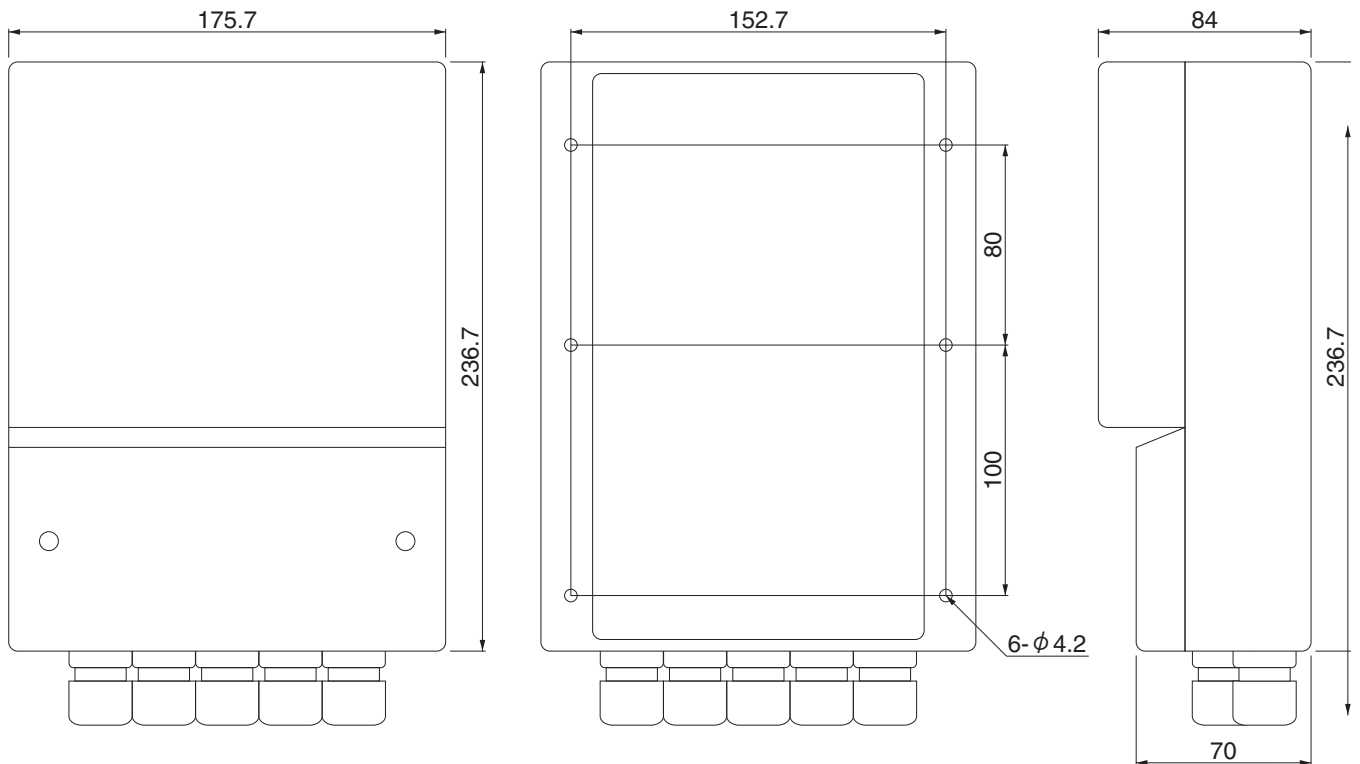
HAL920 寸法図

Outline Drawing

■センサ Sensor



■本体 Main unit



本物電子株式会社

HONDA ELECTRONICS CO.,LTD.