

Product Overview

MODEL5100 point-type flammable gas detector for industrial and commercial use adopts Pd alloy thin-film hydrogen detection technology. This technology features absolute hydrogen specificity with no cross-response to other flammable gases. Meanwhile, the sensor chip combines a Pd alloy-oxide semiconductor field-effect transistor (MOSFET) structure and a Pd alloy thin-film resistor structure, and adopts high-sensitivity Pd alloy doping & thin-film preparation technology, and specific composite thin-film preparation technology. These enable the MODEL5100 sensor to have a low detection limit, fast response time, and excellent long-term stability.

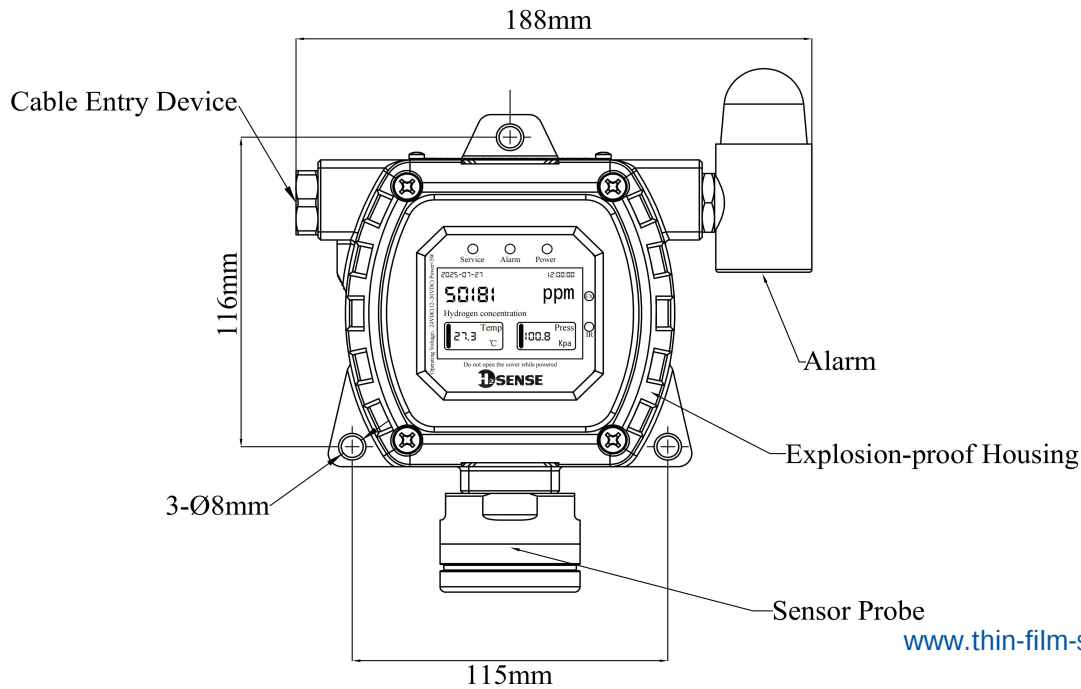
MODEL5100 product has obtained explosion-proof certification and is equipped with a pressure compensation function. Its outputs include 4-20mA analog signals, RS485 digital signals, and relay outputs. Additionally, it is fitted with an on-site high-definition color display and an infrared remote control, with an optional audible and visual alarm. It is mainly used in industries and fields such as hydrogen production, hydrogen storage, hydrogen transportation, hydrogen fuel cells, lithium battery energy storage, gas leakage, chemical industry, and chemical laboratories—specifically in hydrogen leakage locations that require long-term monitoring.



Product Performance Parameters

Main Indicators		Electrical Characteristics and Others	
Measurement Range (H2)	0~ 100% LEL	Analog Output	4 ~ 20 mA
Measurement Accuracy(H2)	±5% LEL	Digital Output	RS485 Modbus_RTU
Response Time (T90)	< 30s	Power Supply	24VDC±10% , 0.3A (max)
Measurement Range (Pressure)	0~350 kPa	Relay Load	1A @30V DC、 0.3A @125V AC
Measurement Accuracy (Pressure)	±1% F.S.	Key Press Mode	Infrared remote control + 4-key operation
Relative Humidity	0~100%RH	Data Recording	Automatic data storage with customizable storage interval; capable of continuously storing 60,000 groups of data with date and time
Gas Medium Temperature	-40 ~ 60	Alarm Mode	Audible and visual alarm (audible-visual alarm optional); Alarm sound: > 95dB
		Alarm Value Setting	Alarm values for hydrogen, pressure and temperature can be set manually
		Explosion-proof Certification	Ex db IIC T6 Gb

Product Dimension Drawing



Functional Features

- Solid-state Pd alloy thin-film technology based on proprietary intellectual property.
 - Does not consume hydrogen and requires no participation of oxygen or air
 - Equipped with relay output and audible-visual alarm.
- Equipped with pressure compensation function.
 - Obtained explosion-proof certification. 
 - Equipped with an infrared remote control.