

TEMPERATURE & HUMIDITY SENSOR

Battery Powered · 10-Year Ultra-Low Power Design



KEY INDICATORS



Range

0–100%RH
-20°C ~ +80°C



Accuracy

±0.2°C
±2%RH (Typical)



Probe

Slotted sintered
cable-mounted



Communication

4G / NB-IoT
/ LoRa



Battery Life

>10 years
(hourly reporting)



Protection

IP65

OVERVIEW

The H Series temperature & humidity sensor is an industrial-grade climate monitoring terminal that integrates high-precision sensing with 4G / NB-IoT / LoRa wireless communication. A slotted sintered probe delivers $\pm 0.2^{\circ}\text{C}$ / $\pm 2\%\text{RH}$ typical accuracy, while the ultra-low-power architecture provides more than 10 years of battery life at hourly reporting. With NFC on-site configuration, OTA remote upgrades and threshold-based cloud alarms, it keeps clean rooms, cabinets, museums and production lines within safe conditions around the clock.

FEATURES

Cloud

Supports Hitelecom public cloud and custom private cloud services.

Green

Ultra-low power consumption — battery life over 10 years under standard hourly reporting.

IP65

Reliable ingress protection for cabinets, clean rooms, museums and production environments.

NFC

Innovative NFC technology for power on/off, device onboarding and on-site maintenance configuration.

OTA

The cloud platform enables one-click remote firmware updates, keeping every device on the latest version.

Innovation

Ultra-low-power design and consistent long-term operation make it an ideal component in IoT solutions.



Data Center



Medical Monitoring



Food Processing



Smart Agriculture



Office Environment



Smart Industry



Hospital



Industrial Automation

Physical Characteristic	Item Numbers	Description
	Product Models	H200 / H300 / H500
	Power Supply	Battery-powered, ultra-low-power design
	Battery Life	>10 years (1-hour reporting interval)
	Probe	Slotted sintered probe, cable-mounted
	Installation	Flexible installation options: ear mount, pole clamp, slot
Frequency Band	LTE-FDD	B1 / B3 / B5 / B8
	LTE-TDD	B34 / B38 / B39 / B40 / B41
T&H Sensor	Measuring Range	Humidity 0–100%RH; Temperature -20°C ~ +80°C
	Accuracy	±0.2°C / ±2%RH (typical)

	Item Numbers	Description
	Protocol	MQTT
Communication	Wireless Options	4G Cat.1 / NB-IoT / LoRa (by model)
	Cloud Access	Hitelecom Cloud Platform, remote data access anywhere
	Operating Temperature	-20°C ~ +80°C
Environmental Range	Protection Rating	IP65
	Alerts	Automatic user notification when thresholds are exceeded
Smart Functions	Configuration	NFC activation, device onboarding and maintenance
	Firmware	OTA remote upgrades
	Product Models	H200 / H300 / H500
Ordering	Customization	Range, probe cable length and mounting options on request

CUSTOMIZATION & SUPPORT

Hitelecom provides OEM/ODM customization for the H Series, including measurement range, probe and cable options, communication variant (4G Cat.1 / NB-IoT / LoRa), reporting interval, and private-platform integration. For model selection, project pricing, or integration support, contact the Hitelecom sales team at sales@hitelecom.cn or call +86 18616602589.



Tel: +86 18616602589 / Web: <http://www.hitelecom.com>

Email: Justin.L@hitelecom.cn

Add: 2nd Floor, Building 1, No. 116 Cheyang Road, Songjiang District, Shanghai