Hitelecom®

TEMPERATURE HUMIDITY & LIGHT

H Series | THL & Custom Sensors

H200 LoRa | H300 4G | H500 NB



KEY INDICATORS

Measuring Range
-20°C to +80°C*
0-100% RH*
Light: by configuration

Accuracy
±0.2°C typical*
±2% RH typical*

Wireless
4G / NB-IoT
/ LoRa

Protection
IP55
T/H reference

Battery Life
Over 10 years*
10-min sampling
4-hour reporting

OVERVIEW

The Hitelecom H Series temperature, humidity and light sensor measures local air temperature, relative humidity and illuminance for indoor monitoring. Designed for museums, galleries, archives and other managed spaces, it connects conditions at selected points with remote review and configured alerts. Custom sensor configurations can be discussed for additional sensing and installation requirements. Choose H200 LoRa, H300 4G or H500 NB-IoT, then match the sensing layout, light measurement and reporting profile to your project.

FEATURES

CLOUD
Send readings to Hitelecom Platform or an agreed customer / private platform.

GREEN
Low-power design: over 10 years.
10-min sampling and
4-hour reporting.*

PROTECTION
Published T/H reference: IP65. Select the THL / custom assembly protection for the installation.

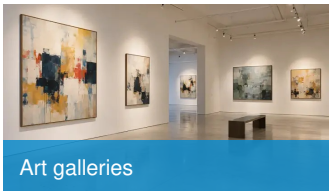
NFC
NFC activation and local configuration on supported terminals.

REMOTE
Remote readings and configurable temperature / RH alerts; light rules by agreement.

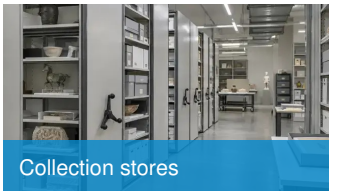
CUSTOM SENSORS
Select sensing channels, ranges, product form, mounting and platform interfaces for your project.

APPLICATIONS


Museums & display cases


Art galleries


Archives & libraries


Collection stores


Conservation labs


Pharmaceutical stores


Data centers

Representative indoor applications; select sensing positions around rooms, display cases and storage zones.

Item		Description
Physical Characteristics	Product models	H200 (LoRa) / H300 (4G) / H500 (NB-IoT)
	Power supply	Battery-powered; battery pack selected by configuration.
	Battery life	Over 10 years: 10-min sampling, 4-hour reporting.*
	SIM card	H300 / H500: IoT SIM or eSIM option; H200: not required.
	Antenna	Built-in
	Size	Dimensions specified for the supplied configuration.
	Mounting	Wall / shelf / case installation, according to configuration.
Connectivity	Wireless options	H200: LoRa; H300: 4G; H500: NB-IoT.
	Regional radio settings	LTE / NB-IoT bands and LoRa channel plan by selected variant.
	Data protocol	MQTT platform interface; H200 connects via a compatible gateway.
THL Measurement	Temperature range	-20°C to +80°C (published T/H reference)*
	Temperature accuracy	±0.2°C (typical, T/H reference)*
	Humidity range	0-100% RH (published T/H reference)*
	Humidity accuracy	±2% RH (typical, T/H reference)*
	Illuminance	Light level in lux; range, accuracy and resolution specified for the supplied configuration.
	Sensing arrangement	Integrated terminal or project-specific probe arrangement.
	Probe option	T/H reference: cable-mounted slotted sintered probe.
Custom Sensors	Measurement channels	Temperature / RH / light or additional channels by project.
	Sensor design	Ranges, sensor position, probe / cable and product form by project.
	Interfaces	Selected radio, data fields, payloads and platform endpoint.

SPECIFICATIONS

Item		Description
Waterproof Rating	Physical body protection	IP55 transmitter option (platform reference)*
	Ingress protection	IP55 (T/H reference); supplied THL / custom assembly by configuration.*
Reliability	Electrostatic discharge immunity	Contact discharge: 6 kV; air discharge: 8 kV
	Surge immunity	Differential mode: 1 kV; common mode: 2 kV
	Fast transient burst	Power supply circuit: 2 kV
Environmental Range	Operating temperature	-30°C to +75°C (transmitter platform reference)
	Operating humidity	5% to 95% RH (non-condensing)
	Storage temperature	-40°C to +85°C (transmitter platform reference)
Integration	Data destination	Hitelecom Platform or an agreed customer / private platform.
	LoRa integration	H200 uses a compatible LoRa receiver / gateway.
	Threshold alerts	Temperature / RH limits; light alert rules by agreement.
Certification References CCC / CE / FCC / RoHS	Safety	EN IEC 62368-1:2020+A11:2020
	Health	EN IEC 62311:2020
	EMC	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-52 V1.2.1 (2021-11)
	Radio	ETSI EN 301 908-1 V15.2.1 (2023-01) ETSI EN 301 908-13 V13.2.1 (2022-02)
	Frequency range	FDD B1: 1920-1980 MHz TX; 2110-2170 MHz RX FDD B3: 1710-1785 MHz TX; 1805-1880 MHz RX FDD B8: 880-915 MHz TX; 925-960 MHz RX TDD B40: 2300-2400 MHz TX / RX
	Maximum output power	FDD B1: 22.89 dBm max. FDD B3: 23.23 dBm max. FDD B8: 24.02 dBm max. TDD B40: 22.24 dBm max.
	Modulation	QPSK, 16QAM

* T/H values are references. Light / custom-channel performance and assembly protection depend on configuration.

* Battery life: over 10 years with sampling every 10 minutes and reporting every 4 hours. Actual service life depends on battery, sensor load, network conditions and temperature.

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