



Humitemp[®]

INTERNET OF THINGS INTELLIGENT DEVICE FOR REMOTE MONITORING

For LoRaWan[™], Sigfox, and Wi-Fi
Networks

Description

Designed for on-site visualization and remote monitoring of relative humidity, temperature, or door states in environments or processes that require precise tracking of these variables. It is offered with WEB IoT platform support for variable monitoring and a 4 digits LCD Display.

FEATURES

General

- Receives up to 2 temperature or door state external sensors.
- Includes an in-built ambient temperature and humidity sensor.
- Wi-Fi, LoRaWAN[™], or Sigfox wireless transmission.
- Can be powered by an AC/DC adapter and has a battery backup of 2 AA batteries.

Visualization

Web app interface for visualization of:

- Current measurements.
- Remote configuration of parameters, such as alarm limits, among others.
- Graphic record of each variable for up to 2 years.

Alarms

- In-built sound alarms, and remotely display alarms on Web or mobile applications.
- External alarms sent by SMS, e-mail, voicemail, Telegram messaging service, or via webhooks.

ORDERING INFORMATION

P/N: HT5.2 Wi-Fi	Device for two sensors and Wi-Fi (IEEE 802.11) 2.4 GHz
P/N: HT5.2 USA Sigfox/LoRaWAN	Device for two sensors and Sigfox/LoRaWAN module for USA / LATAM / AU
P/N: HT5.2 EU Sigfox/LoRaWAN	Device for two sensors and Sigfox/LoRaWAN module for EU
P/N: HT-TEMP	Temperature sensor for the Humitemp [®] , -40.0 °C (-40°F) to 80°C (176°F).
P/N: HT-DOOR	Digital door sensor

POWER REQUIREMENTS

Parameter	Type	Value	Units
Battery requirements	2 AA size cells	3	V
Max. Electric current	--	0.15	A
Nominal DC Voltage	--	5	V

RECOMMENDED OPERATING CONDITIONS

Operating Conditions	Value	Units
Storage Temperature	10 (50) – 45 (113)	°C (°F)
Storage Humidity	60±25	% R.H./Non-Condensable
Operating ambient temperature	0 (32) – 45 (113)	°C (°F)
Operating ambient humidity	60±25	% R.H./Non-Condensable
Standards	Protection Type	
IEC norm 60529/EN 60529	IP40 / Indoor use only	

POSSIBLE APPLICATIONS

Purpose	Range	Common Fields
Humidity and temperature monitoring (In-built sensor)	R.H.: 0% to 99% (Non-Condensable) T: 10°C (50°F) to 45°C (113°F)	<ul style="list-style-type: none"> ✓ Laboratories. ✓ Blood banks. ✓ Pharmacies. ✓ Food processing and production plants. ✓ Veterinary services. ✓ Hospitals.
Refrigeration temperature monitoring (External sensor)	T: -40°C (-40°F) to 80°C (176°F)	<ul style="list-style-type: none"> ✓ Freezers - Refrigerators - Cold rooms. ✓ Stability chambers. ✓ Incubators. ✓ Server rooms. ✓ Flower farms. ✓ Cellars. ✓ Refrigerated transport.


WIRELESS COMMUNICATION SPECIFICATIONS

Device Type	Standard	Note
HT5.2-Wi-Fi	Wi-Fi® (IEEE 802.11) 2.4 GHz. WPA2 encryption.	Stores configuration data for up to 3 networks.
HT5.2 USA Sigfox/LoRaWAN	Sigfox, RC2 902 - 905Mhz / RC4 920 - 923Mhz, 22dBm ERP LoRaWAN, US902-928, AU915-928	Zone 2 (USA, Mexico, Brazil) and Zone 4 (Latin America, Australia).
HT5.2 EU Sigfox/LoRaWAN	Sigfox, RC1 868MHz LoRaWAN, EU863-870	Zone 1 (Europe).

SENSORS TECHNICAL SPECIFICATIONS


Ambient Temperature and Relative Humidity Sensor (In-built)

Parameter	Value / Type
Temperature Range	10°C (50°F) to 45°C (113°F)
Resolution	0.1°C (0.1°F), over the whole range
Max. Error	0.5°C (1°F), over the whole range
Relative Humidity Range	0% to 99.9% of R.H. (Non-Condensable)
Resolution	0.1%, over the whole range
Max. Error	5%, over the whole range




NTC Temperature Sensor (P/N HT-TEMP)

Parameter	Value / Type
Temperature Range	-40°C (-40°F) to 80°C (176°F)
Resolution	0.1°C (0.1°F), over the whole range
Max. Error	0.5°C (1°F), over the whole range
Probe Type	Stainless steel probe, PVC 2m cable

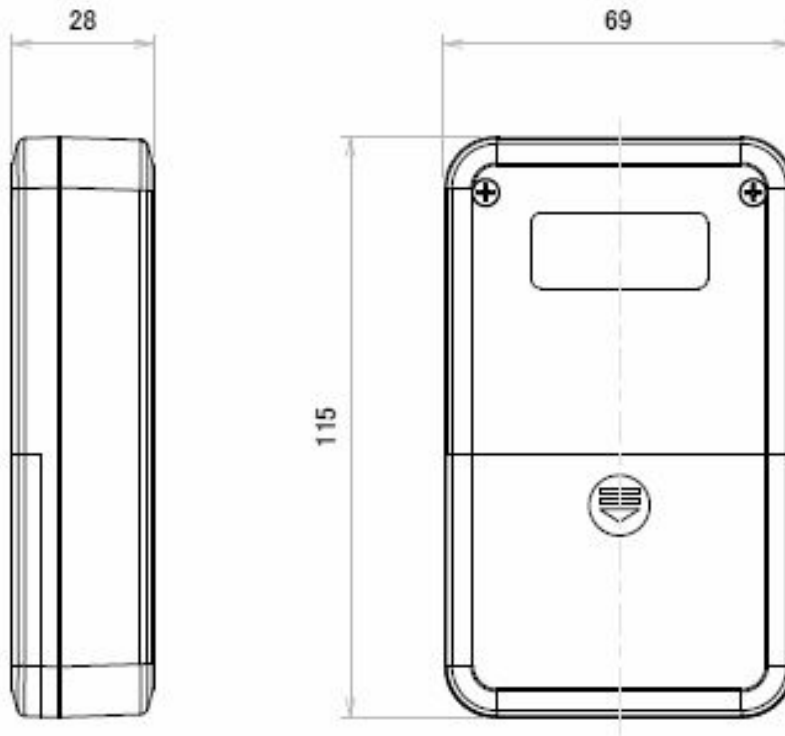


Digital Door Sensor (P/N HT-DOOR)

Parameter	Value / Type
Range	0 or 1
Resolution	1 bit
Probe Type	ABS case for 2 magnets and the reed switch



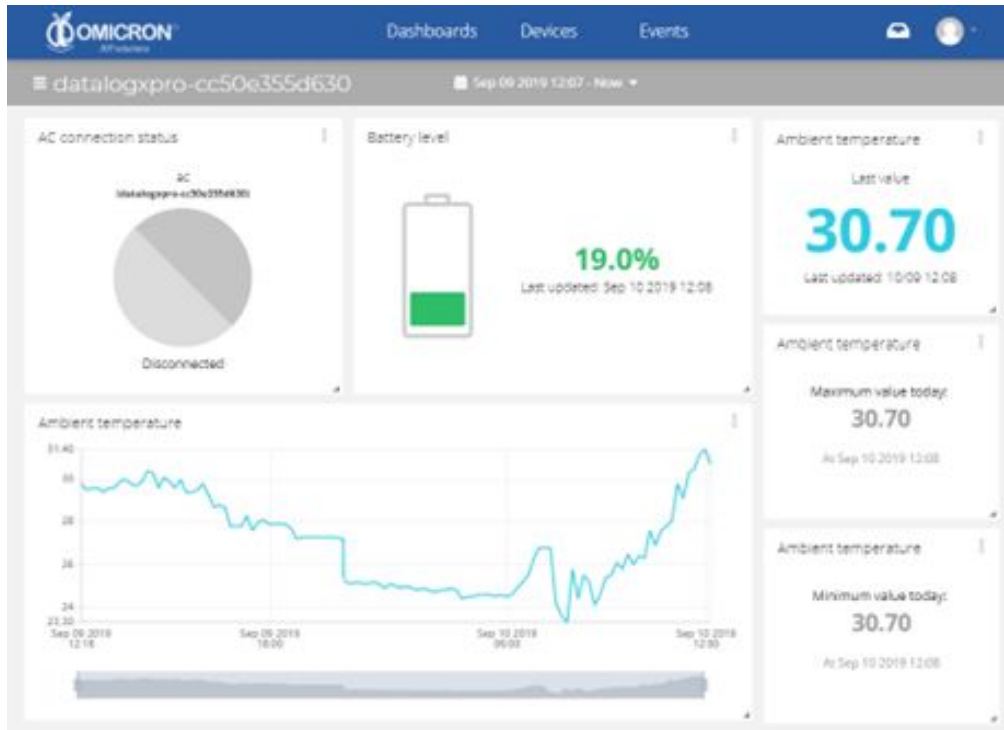
DIMENSIONS



All dimensions in mm. Enclosure molded from ABS UL94V-0 plastic.

Total weight: 110g, without accessories and sensors attached.

WEB PLATFORM AND SERVICES



Humitemp[®] devices are offered with the IoT Centriomega[®] WEB monitoring platform.

Users can access the Omicron platform via PC, Smartphone, or Tablet, to perform:

- ✓ Remote monitoring and visualization of sensor's variable records, in graphs and data tables, for up to 2 years.
- ✓ Remote configuration of the device parameters.
- ✓ Alarm management for variables out of range, battery levels, and AC power failure.
- ✓ Add comments to records.
- ✓ Set alarm limits, alarm events, and notifications via email, SMS, voicemail, Telegram messaging service, or webhooks.