

PRODUCT DATASHEET

CHESTER Clime

Continuous temperature and humidity monitoring that runs for years on a battery — from cold rooms to grain silos, with audit-ready records.

REFERENCE NUMBER HPD.260706.05-R1 DATE July 6, 2026

**±0.2 °C**

thermometer accuracy

3+ yrs

battery life

32

1-Wire probes

8

wireless BLE tags

Why integrators pick it

■ Autonomous monitoring

Runs on a primary battery for 3+ years with no wiring or external power required — deploy anywhere in minutes and forget about the installation until the data says otherwise.

■ Configurable alerts

Thresholds for temperature and humidity raise instant alerts when conditions go out of range — damage is prevented, and every value is timestamped for the audit trail.

■ Wide sensor support

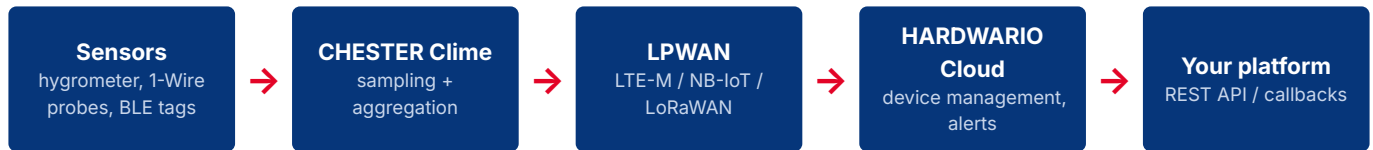
Temperature to ±0.2 °C and humidity across the full 0 to 100 % range, plus up to 32 external 1-Wire temperature probes or 8 wireless BLE tags for distributed monitoring from one unit.

■ LPWAN connectivity

Transmits via NB-IoT, LTE-M, or LoRaWAN from deep indoor locations and remote sites where Wi-Fi doesn't reach — no gateway, no cabling, no IT tickets.

Where it fits

CHESTER Clime is the fastest path to continuous environmental evidence: GDP and HACCP cold-chain compliance in pharmaceutical storage and food warehouses, hotspot detection in grain silos before a harvest is lost, climate data that drives HVAC decisions across building portfolios, and server-room alerts that arrive before the equipment fails.



From probe to compliance archive — each device samples, aggregates (min/max/average/median), and reports in configurable batches.

The device samples every sensor on a configurable period, aggregates the samples locally, and transmits timestamped batches — radio time stays low, batteries last years, and no reading is lost between reports. Local commissioning and firmware updates run over Bluetooth Low Energy with HARDWARIO Manager; fleets are managed remotely through HARDWARIO Cloud with data handover via REST API or HTTP callbacks.

Technical specification

MEASUREMENT

Thermometer range	−20 to +80 °C
Thermometer accuracy	±0.2 °C (from 0 to 65 °C)
Hygrometer range	0 to 100 %
Hygrometer accuracy	±2 % (from 10 to 90 %)
External sensors	Up to 32× DS18B20 1-Wire temperature probes, or up to 8 wireless BLE temperature/humidity tags

CONNECTIVITY

Cellular	LTE-M / NB-IoT (Nordic nRF9160)
LoRaWAN	Class A, EU868 (Murata Type ABZ, LoRaWAN 1.0.2)
Local access	Bluetooth Low Energy — configuration and firmware updates via HARDWARIO Manager
Antenna	Internal, or external via SMA pigtail

POWER

Primary battery	Lithium cell 3.6 V, 7 700 mAh
Battery life	3+ years at typical reporting intervals
External power (Clime Z)	DC 6 V to 28 V with rechargeable Li-ion backup battery
Idle consumption	< 180 µA
Peak consumption	< 250 mA

ENVIRONMENT & MECHANICAL

Operating temperature	−20 to +60 °C
Storage temperature	−30 to +70 °C
Ingress protection	IP65
Enclosure	130 × 175 × 45 mm

Ordering information

Two application variants cover the common deployment scenarios: **CHESTER Clime** runs fully on its primary battery; **CHESTER Clime Z** adds mains powering with a rechargeable backup battery and power-outage event reporting. Beyond these, a family of sensor variants shares the same firmware and cloud integration: **Clime 1W** and **1WH** for multiple DS18B20 1-Wire probes (1WH adds the external hygrometer), **Clime RTD** for two Pt1000 4-wire probes, and **Clime TC** for two type K thermocouples — each with a matching enclosure.

Ordering code	Description
CHESTER-M-BCGLS	CHESTER mainboard — LTE-M/NB-IoT, LoRaWAN, BLE, GNSS
CHESTER-S2	External hygrometer probe — temperature and humidity
CHESTER-Z1	Backup module — DC 6–28 V input + rechargeable Li-ion cell (Clime Z variant)
CHESTER-E1-LP	Enclosure with SMA antenna pigtail

COMPLIANCE

CE

UKCA

CHESTER Clime conforms to the Radio Equipment Directive 2014/53/EU — including the EN 18031-1 cybersecurity requirements mandatory since August 2025 — and the RoHS Directive 2011/65/EU, and to the equivalent UK statutory requirements. The built-in radio modules additionally carry FCC certifications for the US market.

Declaration of Conformity: HDC.260706.04

Scope a monitoring pilot

A CHESTER Clime evaluation unit reports temperature and humidity to your platform in an afternoon. Tell us about the application — zones to cover, thresholds that matter, connectivity on site — and we will configure a pilot kit that matches it, including integration support for your first deployment.

- [Explore CHESTER Clime in the HARDWARIO store](#)
- [Read the developer documentation](#)

ABOUT HARDWARIO

HARDWARIO a.s. designs and manufactures industrial IoT devices in Liberec, Czech Republic. Founded in 2016 and listed on the Prague Stock Exchange, the company does more than 80 % of its business through its partners.

HARDWARIO a.s.

HEADQUARTERS
U Jezu 525/4
460 01 Liberec
Czech Republic

HARDWARIO LTD

LONDON OFFICE
10 John Street
London WC1N 2EB
United Kingdom

HARDWARIO LLC

HOUSTON OFFICE
2500 Wilcrest Dr, Suite 624
Houston, Texas 77042
USA