

PRODUCT DATASHEET

CHESTER Scale

Turn any load cell into a cloud-connected weighing system — battery-powered, installed in minutes, running for years.



REFERENCE NUMBER HPD.260706.01-R1 DATE July 6, 2026

4

load-cell channels

1 000 kg

measuring range

3+ yrs

battery life

IP67

enclosure rating

Why integrators pick it

■ Industrial load-cell interface

Connects standard 4-wire strain-gauge load cells to a 24-bit analog-to-digital converter — up to four channels, each with its own measurement range on a single unit.

■ Remote tare and calibration

Tare and multi-point calibration run as cloud commands. Routine adjustments stop costing a site visit — your technicians stay in the office.

■ No infrastructure required

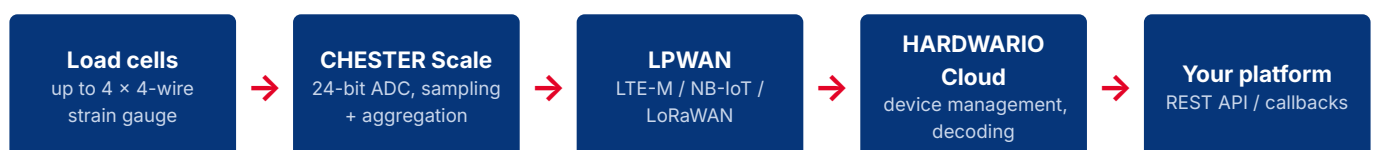
Reports over LTE-M, NB-IoT, or LoRaWAN. No cabling, no gateway on site, no PLC integration — weight data lands in the cloud from day one, even in remote or mobile installations.

■ Change detection built in

Detects weight changes and reports events between regular intervals — the basis for consumption tracking, automatic reordering, and tamper detection.

Where it fits

CHESTER Scale is the fastest path from “we should weigh this” to a production weight feed: inventory levels in vendor-managed stock, fill state of waste containers for route optimization, grain bins and feed silos in agriculture, or hopper and batch weights in process control. Weight is often the cheapest proxy for a value your client actually cares about — fullness, consumption, or product count.



From load cell to your client's dashboard — each device samples, aggregates (min/max/average/median), and reports in configurable batches.

The device samples every channel 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 from a phone with HARDWARIO Manager; fleets are managed remotely through HARDWARIO Cloud with data handover via REST API or HTTP callbacks to any platform you run.

Technical specification

MEASUREMENT

Load-cell channels	4 (two per CHESTER-X3C module, slots A and B)
Load-cell type	4-wire strain gauge
Converter	24-bit delta-sigma ADC
Measurement range ¹	0 kg up to 1 000 kg
Measurement resolution ¹	0.001 kg up to 10 kg
External sensors	1-Wire temperature probes; 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 (Scale 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	IP67
Enclosure	ASA plastic, 130 × 175 × 45 mm

¹ Depends on the connected load cell / scale module type.

Ordering information

Two application variants cover the common deployment scenarios: **CHESTER Scale** runs fully on its primary battery; **CHESTER Scale Z** adds mains powering with a rechargeable backup battery and power-outage event reporting.

Ordering code	Description
CHESTER-M-BCGLS	CHESTER mainboard — LTE-M/NB-IoT, LoRaWAN, BLE, GNSS
CHESTER-X3C:A	Load-cell interface module, 2 channels, slot A
CHESTER-X3C:B	Load-cell interface module, 2 channels, slot B (for channels 3–4)
CHESTER-Z1	Backup module — DC 6–28 V input + rechargeable Li-ion cell (Scale Z variant)
CHESTER-E5-P	IP67 enclosure with SMA antenna pigtail

COMPLIANCE

CHESTER Scale 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.260706.16

CE
UKCA

Scope a weighing pilot

A CHESTER Scale evaluation unit connects to your load cells and reports to your platform in an afternoon. Tell us about the application — ranges, environment, connectivity on site — and we will configure a pilot kit that matches it, including integration support for your first deployment.

- [Explore CHESTER Scale 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.

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