

PRODUCT DATASHEET

CHESTER GrainLink

Real-time temperature and humidity across every silo — multi-point sensing cables, cellular connectivity, and power options for even the most remote bins.



REFERENCE NUMBER HPD.260706.11-R1 DATE July 6, 2026

−40 °C

field-tested

16

sensors per cable

1 000+

systems deployed

IP67

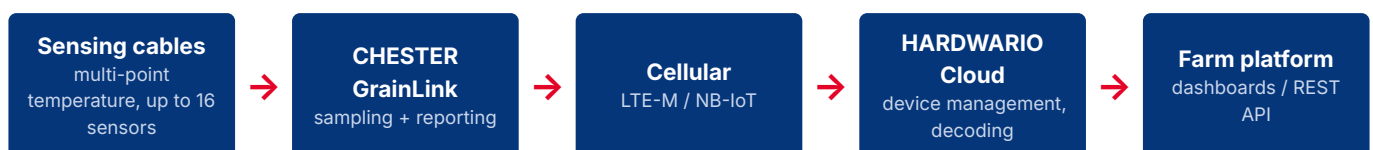
enclosure rating

Why integrators pick it

- **Multi-point temperature monitoring**
Temperature cables installed across the silo — up to 16 sensors per cable — detect hotspots and moisture migration early, before grain quality deteriorates.
- **Volume & fill-level tracking**
Accurately determine the total volume of grain stored using sensor data — eliminating manual inspections, climbing, and guesswork.
- **Extreme-temperature operation**
Field-proven from −40 °C in Canadian winters through extreme Australian summers — across more than 1 000 deployed systems.
- **Flexible power options**
Powered by battery, external DC, or solar panels with rechargeable backup for continuous off-grid operation — no mains power required at the bin.

Where it fits

CHESTER GrainLink is a purpose-built grain storage monitoring system developed in partnership with GrainLink for the North American market. It detects temperature rises that signal spoilage risk weeks before visible damage occurs, tracks storage conditions from harvest through sale for buyers and auditors, and puts hundreds of silos across multiple farm locations on a single dashboard — so aeration and handling decisions follow real data, not driving routes.



From the silo to the farmer's dashboard — silo conditions delivered in real time, with hotspot and spoilage-risk alerts.

Each unit samples the temperature cable and the optional humidity probe and reports silo conditions over LTE-M or NB-IoT cellular networks — no gateway, no site network, working even in the most remote locations. Local commissioning and firmware updates run over Bluetooth Low Energy from a phone with HARDWARIO Manager; fleets are managed remotely through HARDWARIO Cloud, with condition data delivered to GrainLink workflows or the buyer's farm management platform.

Technical specification

MEASUREMENT

Temperature sensors	Multi-point cable (up to 16 sensors)
Temperature range	-20 to +60 °C
Temperature accuracy	±0.5 °C
Humidity sensor	Optional external probe
Detection	Hotspots and moisture migration across the silo profile

CONNECTIVITY

Cellular	LTE-M / NB-IoT (Nordic nRF9160)
Local access	Bluetooth Low Energy — configuration and firmware updates via HARDWARIO Manager

POWER

Power options	Battery, DC adapter, or solar
Off-grid operation	Solar panels with rechargeable backup battery

ENVIRONMENT & MECHANICAL

Operating temperature ¹	-20 to +60 °C
Ingress protection	IP67
Dimensions	130 × 175 × 45 mm

¹ Field-proven from -40 °C in Canadian winters through extreme Australian summers.

Ordering information

CHESTER GrainLink is delivered as a configured system: a rugged CHESTER unit set up for harsh outdoor storage environments and remote connectivity, a **multi-point temperature cable** with the sensor layout sized to the silo geometry, an optional **external humidity probe**, and a **power package** — battery, DC, or solar-backed — selected for the site and reporting interval. Tell us the silo sizes and grain types in scope,

the preferred power source, and who needs alerts before aeration or handling decisions — systems arrive ready to mount, with a repeatable bill of materials for the rollout that follows the pilot.

COMPLIANCE

CHESTER GrainLink 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.260706.10

CE**UKCA**

Scope a grain-monitoring pilot

A CHESTER GrainLink pilot puts your client's priority bins on a live dashboard before committing to a farm-wide rollout. Tell us about the application — silo sizes, grain types, power available on site — and we will size a pilot system that matches it, including integration support for your first deployment.

- [Explore CHESTER GrainLink in the HARDWARIO store](#)
- [Learn more about the CHESTER platform](#)

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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