



Advanced Control and Monitoring

+ GH'S SOLUTION: COREBOX: Control + Monitoring + Connectivity*.

/ Control:

- Electronic load limiter linked to a load cell.
- Controls hoist motor in the event of an over-temperature occurrence.

/ Monitoring:

- Operational data: Times, Moves, Cycles, Loads Lifted.
- Incident log: Overloads, Over-Temperature, VFD (variable speed drive) faults.
- Remaining DWP (Design Working Period, calculated according to ISO 12482). It is reported as SWP (Safe Working Period).

/ Connectivity*:

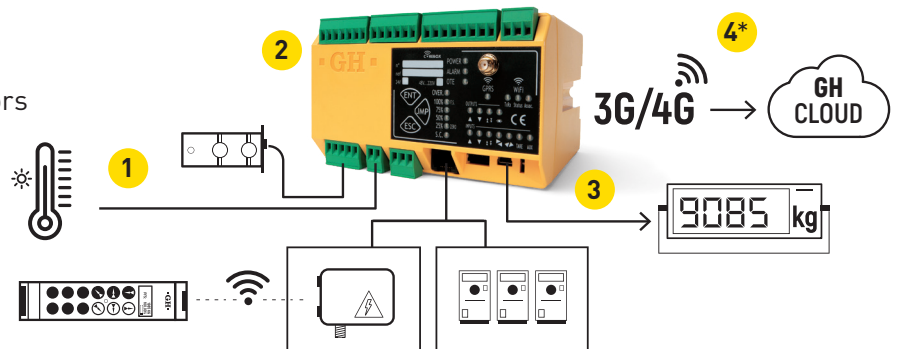
- Communicates the monitored parameters via a cellular network to GH CRANES's proprietary data platform. GH CRANES uses this information to provide its customers with **GH Realtime** a set of advanced usage and maintenance services
- Using the CUSTOMER PORTAL of GH CRANES (portal.ghcranes.com), the crane's owner can access complete and real-time information on the crane's operation.

+ ADVANTAGES

- / All functions (Control + Monitoring + Connectivity*) integrated into a single device.
- / Available connectivity to accessories, such as Displays and Radio Controls, for continuous viewing of data such as Lifted Loads and Safe Working Period (SWP).
- / By communicating via 3G/4G** networks, COREBOX does not interfere with the customer's internal network.
- / COREBOX may be retrofitted to other crane brands, enabling monitoring and SWP calculation, without interfering with their operation.

+ HOW IT WORKS

- 1 COREBOX receives data from the load cell, the VFD's, and the thermal sensors of the motors.
- 2 COREBOX process and records the operating parameters of the crane and the errors detected.
- 3 COREBOX sends the data of the lifted load and SWP to the display or radio control.
- 4* COREBOX communicates via the cellular network, to GH CRANES'* proprietary platform*



TECHNICAL DETAILS

Power supply 48-220Vac. Analog load cell input. Voltage inputs for movements with 48-220Vac range. Outputs to relay with possibility of timing. Input for motor over-temperature sensor. Optimized for Schneider variable frequency drives and Danfoss-Ikusi and Autec radio controls.

* Connectivity is optional and involves additional cost.

** Connectivity is structured to match locally available 3G or 4G networks.