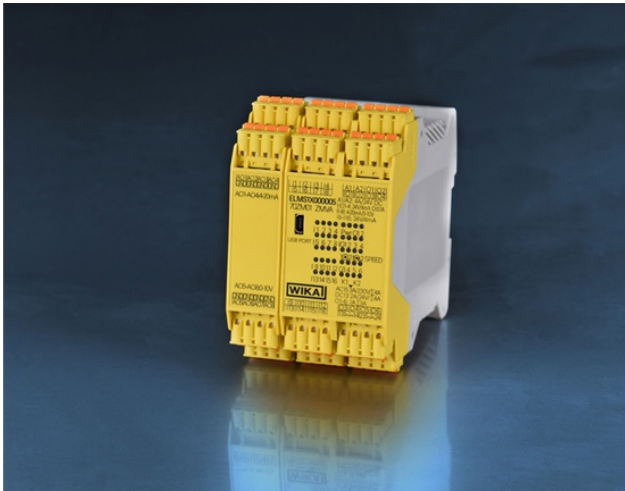


SIL 2 / PL D

## Certified safety control system for cranes

**Wika (Germany) offers the ELMS1 control system to protect cranes against overload. The system with CANopen-connectivity combines safety electronics, software, and safety force transducers.**



The ELMS1 system (Source: Wika)

The solution can be used in lifting systems and cranes that are not at risk of tipping. It is a dual hoist system approved by the German social accident insurance association (DGUV). Certified in accordance with the ISO 13849-1 it reaches the SIL 2/PL d (safety integration level/performance level).

The safety solution consists of a control module and individual function modules (force transducers) that can be mounted next to each other on a redundant DIN-rail bus. Using the dual hoist system, up to four containers can be lifted at the same time. The product warns of switching thresholds and switches off in the event of an overload. The central module controls up to eight redundant force transducers. 16 safe inputs (eight analog inputs, eight digital inputs), two safe relay outputs, and six safe solid-state outputs are available. The status of the inputs and outputs, operating voltage, and other diagnostic messages are displayed on the LED matrix.

Visualization of the relevant data via a display is possible as an option. The system dedicated for overload protection and slack rope detection is configurable via PC and can be installed in new or existing applications. It can be used in harbor cranes, ship and offshore cranes, gantry cranes and hoists, conveyor systems, machine building, and plant construction. Implementation and certification of customer-specific applications is offered by the company.

With over 10 000 employees, Wika is a worldwide provider of solutions for pressure, temperature, level, and flow measurement. The company also offers calibration technology.

[of](#)