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Smart encoders & actuators

## New control solutions for modern mobile equipment

*Easy-CAN series absolute encoders and IX series inclinometers from Lika Electronic are perfectly suited for dependable and accurate operation in tough industrial environments such as construction vehicles, material handling, mobile cranes, forklifts, bucket trucks.*

Thanks to its 30-year extensive experience over a wide range of industries worldwide, Lika Electronic also offers a complete portfolio of solutions developed for the mobile equipment sector: incremental and absolute encoders, contactless encoders, redundant encoders, draw-wire encoders, inclinometers. Because of the harsh operating environment, they are designed to handle dirt, moisture, vibration, shock and extreme temperatures and provide the highest levels of safety and performance. Among the latest news in the range are the updated **Easy-CAN absolute rotary encoders and the new IX 1-axis and 2-axis absolute inclinometers.**

**For boom rotation and lifting (pitch) angle measurement, Easy-CAN series encoders are the cost-effective solution thanks to the standalone application and the simple point-to-point integration.**

They are ideal for Single Master-Single Slave networks and profit from both all CAN benefits and an essential compact design at the same time. Single connection cable and simplified electronics minimize the overall foot-print and costs and ease in-



stallation especially in constrained space. They comply with DS301 and DS406 Class 2 profiles and include the whole packet of **CANopen functions:** position and velocity readout, scaling function, preset, extended diagnostics etc. They are sturdy with high IP67 protection rate (IP65 at shaft side) and offer the complete industrial  $\varnothing$  58 mm flange and shaft options: 6, 8, 9.52, 10, 11, 12 mm (0.24", 0.31", 3/8", 0.39", 0.47") solid shaft and 14, 15 mm (0.55", 0.59") hollow shaft.

Easy-CAN series encoders are available in 13- and 18-bit singleturn resolution and 24-, 25-, 26-, 27- and 30-bit multiturn resolution. Output connection can be either radial or axial for both cable and M12 connector options.

**IX series 1-axis and 2-axis absolute inclinometers with analogue and CANopen interface monitor the leveling of vehicles and platforms during operation (roll) and the rotation and pitch angle in the crane booms.**

The measurement range is from  $\pm 5$  deg up to  $\pm 60$  deg in 2-axis models and up to  $\pm 360$  deg in 1-axis models with high resolution (up to 0.001 deg) and high accuracy (up to  $\pm 0.05$  deg). IX inclinometers are compact, rugged and IP67 protected. The robust metal enclosure and the resin-coated electronics allow for high protection against mechanical stresses, vibrations, thermal shocks (up to  $-40^{\circ}\text{C}$   $+85^{\circ}\text{C}$  /  $-40^{\circ}\text{F}$   $185^{\circ}\text{F}$ ) and moisture. The output is either analogue current (4-20mA) / voltage (0.5V-4.5V) signals or the CANopen interface in compliance with DS301 and DS410 profiles. CANopen models further add programmable resolution from  $0.1^{\circ}$  to  $0.001^{\circ}$ , complete diagnostics and optional antivibration filter. Cable and M12 connector options are both available (other standard automotive connectors on demand).