



ELM3002-0205 EtherCAT measurement terminal enables high-voltage measurement

The ELM3002-0205 EtherCAT measurement terminal is designed for high-voltage measurement on batteries, generators and motors. It supports the four measurement ranges of ± 60 , ± 120 , ± 500 and $\pm 1,000$ V, respectively, and is particularly suitable for applications in the fields of electromobility and renewable energies.

In the field of renewable energies, the new ELM3002-0205 supports, for example, the efficiency increase of wind turbines via direct converter control. A prerequisite for this is voltage measurement in the 1,000 V range directly on the generator. The electromobility segment, for example, has similar require-

ments in the rapidly increasing worldwide large-scale production of high-quality car batteries and accumulators.

With the oversampling function, the 2-channel measurement terminal achieves a maximum sampling rate of 50 ksp/s per channel. This high sampling rate in high voltage applications allows deeper insights into the underlying energy applications. In generator control, for example, faster response times are possible as a result. Moreover, high measurement accuracy enables a more accurate frequency detection, which in turn improves the frequency stabilization in power grids. In battery testing applications, load and quality tests can be reliably performed due to the high sampling rates possible.

Specialized in extra-high voltages, the ELM3002-0205 is the new member of the ELM3xxx measurement device family, which now comprises more than 30 high-precision and industrial-grade EtherCAT Terminals. Integrated into the large EtherCAT Terminal portfolio from Beckhoff, the measurement terminals are a foundation for future-proof automation.

More information:

www.beckhoff.com/elm3002-0205