

Measurement of high voltage, current, and power

In the area of high-voltage measurement technology, CSM has developed HV (high voltage) breakout modules (HVBM). They output the measured data simultaneously with a data rate of up to 10 kHz via CAN interface.

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HV breakout modules 1.1 / 1.2 (Photo: CSM)

The 1- or 3-phase modules can synchronously measure high voltages and currents in high-voltage environments with a data rate of up to 1 MHz. They also offer an online high-speed power calculation. The cables are routed into the housing through PG cable glands or special adapters with HV plugs and connected there. Voltages up to ± 1000 V are measured directly. Current measurement up to ± 800 A is carried out via shunt modules.

These shunt modules contain a differential amplifier as well as a temperature sensor and memory to store calibration data for automatic online temperature compensation. HVBM output the measured data with a maximum data rate of up to 1 MHz via Ethercat interface and simultaneously with a data rate of up to 10 kHz via the additional CAN interface. This allows a high speed data acquisition via Ethernet and at the same time data recording via CAN data-logger.

The company shows its products at the Automotive Testing Expo 2019 on stand 1332.

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