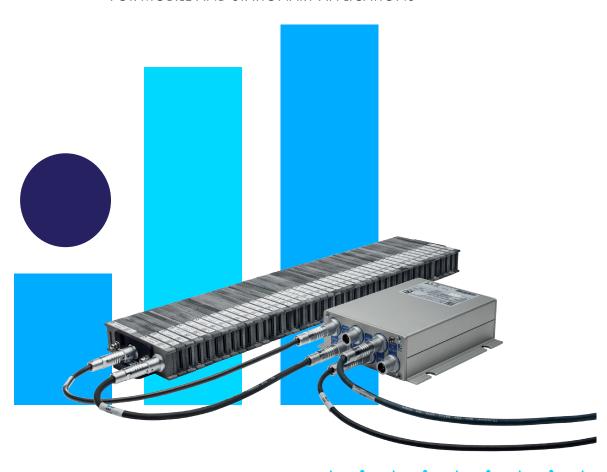


# CVM G5

CELL VOLTAGE MONITORING
FOR MOBILE AND STATIONARY APPLICATIONS



### **BE SMARTER**

- Ultra-compact, modular design.
- Integrated cable break detection.
- ▶ Negative voltage ranges measurable.
- Modern webbased user interface.

- ► Scalability enables customized CVM systems.
- ▶ High measurement accuracy and time-synchronous data acquisition.
- Suitable for stationary and mobile application areas, even under harsh environmental conditions.

## PRODUCT DIVISION MODULAR MULTICHANNEL I/O-MODULES





#### Technical Data CVM G5

Dimension per module (LxWxH)	100 x 10,5 x 30 mm
Number of measuring channels per module	10
Resolution	1 4 bit, approx. 700 μV
Measuring range per channel	-1 to +% V, optional: -3 to +3 V
Input (self-heating)	<300 mV
Accuracy - industrial temperature range - automotive temperature range	±3 mV (-25 to +85°C) ±6 mV (-40 to +105°C)
Galvanic isolation	1400 V <sub>DC</sub> permanent
Power supply	4,5 to 32,0 $V_{\rm DC}$
Communication interfaces	2x CAN CAN 2.0B ISO 11898
Start-up time	<0,5 s
Relative humidity	20 to 60 %
Integrated temperature sensor	±2 °C
Time synchronisation of all measuring channels	≤1000 Hz (internal) ≤100 Hz (external)
Operating temperature	-40 to +105 °C
IP protection class	IP65 (EN60529)
Common mode suppression	≥80 dB
Weight	25 g

#### **Application Areas**

The CVM G5 modules (Cell Voltage Monitoring) are used to monitor the individual cell voltages of fuel cell stacks, electrolysers and battery systems. They are optimised for use in research and development and are used both in test benches and in test vehicles. Accordingly, the CVM G5 systems provide reliable measurement data even under harsh environmental conditions. Depending on the data volume and speed of data processing, the modules can be operated directly via CAN bus or in combination with the optional MASTER process module via LVDS, Ethernet, EtherCAT or GPIO.

From development to the test phase to the final application in mobile and stationary systems – we create the perfect solution for you and your measurement and test requirements in the following areas:

- Automotive, marine, aerospace
- Test benches, plant engineering
- Measurement, control and regulation technology

#### **Ordering Information**

- Basic configuration:
   MCM-IntelliProbe-U10Link
   (Supply and communication connection module),
   MCM-IntelliProbe-U10
   (Cell voltage measurement module),
   MCM-IntelliProbe-U10T
   (Cell voltage measurement module with bus termination)
- Accessories:
   Processing moduleMASTER (Data processing module),
   CVM Web Interface
- ULTRA COMPACT DESIGN
   FLEXIBLE AND MODULAR
   FOR ≤600 CHANNELS / CELLS
   STATIONARY AND MOBILE APPLICATION AREAS