

# imc CANSAS-FBG-T8

interference-free • dynamic • safe



Fiber-optic CAN measurement module for safe temperature measurement

# Fiber-optic temperature measurement

## Safe measurement in HV environments

The fiber-optic CAN measurement module from imc makes testing in high-voltage environments safer and easier. Thanks to the optical operating method, the measuring point and the instrument are fully decoupled. At eight optical inputs, the module can measure temperatures on arbitrary electrical levels using specially developed sensors with fiber Bragg grating technology (FBG). Data are output via CAN.

### At a glance

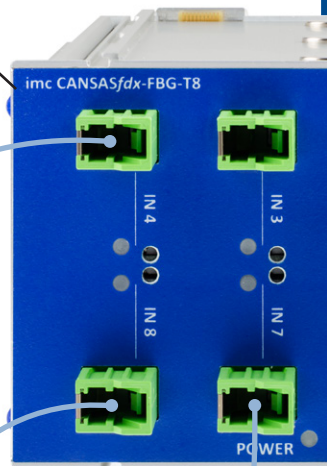
- 8 channels
- Temperature measurements
- 1 kHz sampling rate
- 100 Hz bandwidth
- CAN output

Highly dynamic measurement with 1 kHz sampling rate

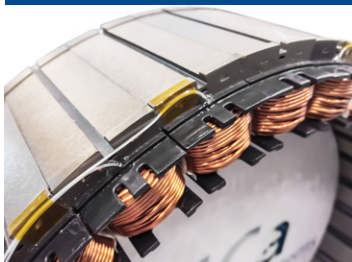
Immunity to EMI/ESD for clean measurement results

Ultra-fast response times of 0.2 s

Operating range -40° C ... +220° C



### Electric motors



Motor winding temperature measurements

### Power electronics

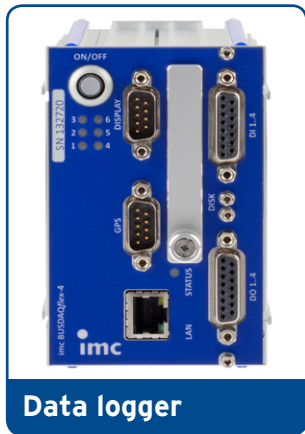


Heating of power electronics

### Battery systems



Temperature distribution during charging and discharging processes

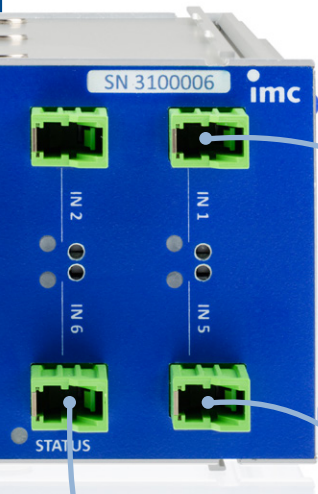


**Data logger**

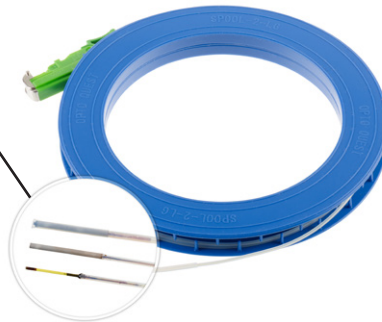


**Test stand environment**

CAN-bus



Three sensor types:  
from small and fast to highly robust

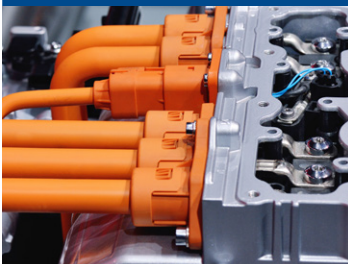


Safe measurement in  
HV environments due  
to non-conductive  
sensor technology

Sensor diameter of 0.5 mm  
fits into plug connector

FBG sensors save up to 90% space  
compared to classic HV sensors

**Wiring harness**



Safety measurements on the  
wiring harness

**Charging equipment**



Heating of connectors  
during charging processes

**HV environment**



Measuring temperatures at  
high potentials



Fiber-optic and electric measurement technology combined in one system

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