

## Improving Efficiency in On-Road Fleet Testing



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## What are the challenges?

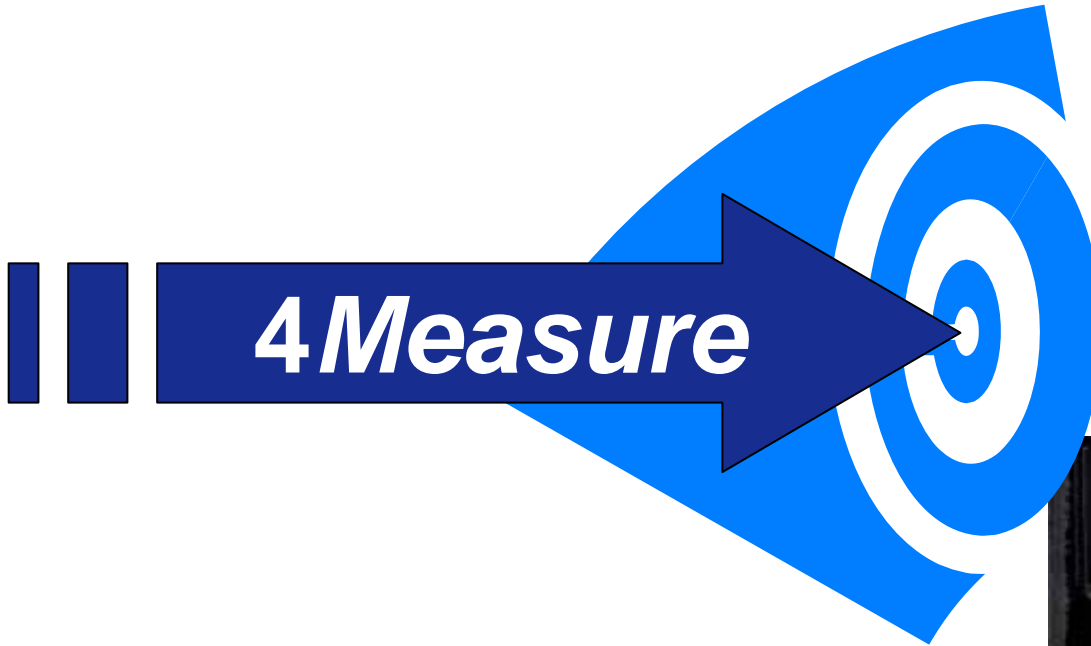
- Increasingly more complex measurement tasks
- Ever-decreasing time for preparation
- Measurement system should be versatile and flexible for all applications
- Preprocessing of measurement data should take place in datalogger
- Measurement system should be as unobtrusive as possible during test drive  
→ autarkic system
- Measurement data should be available during or directly after test drive
- Measurement System should have connections compatible to other manufacturers

# The Solution: 4Measure

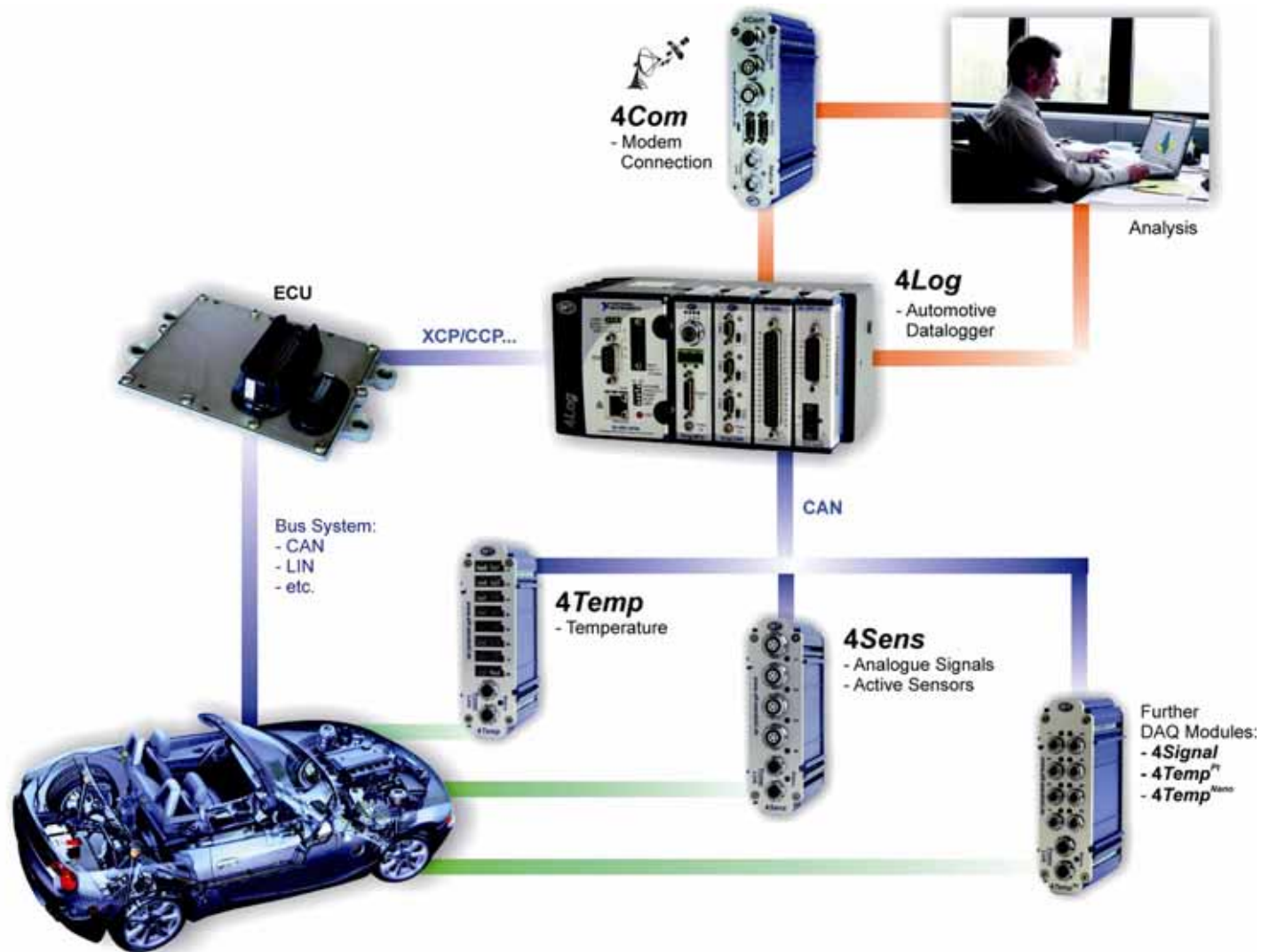


4Temp

4Sens



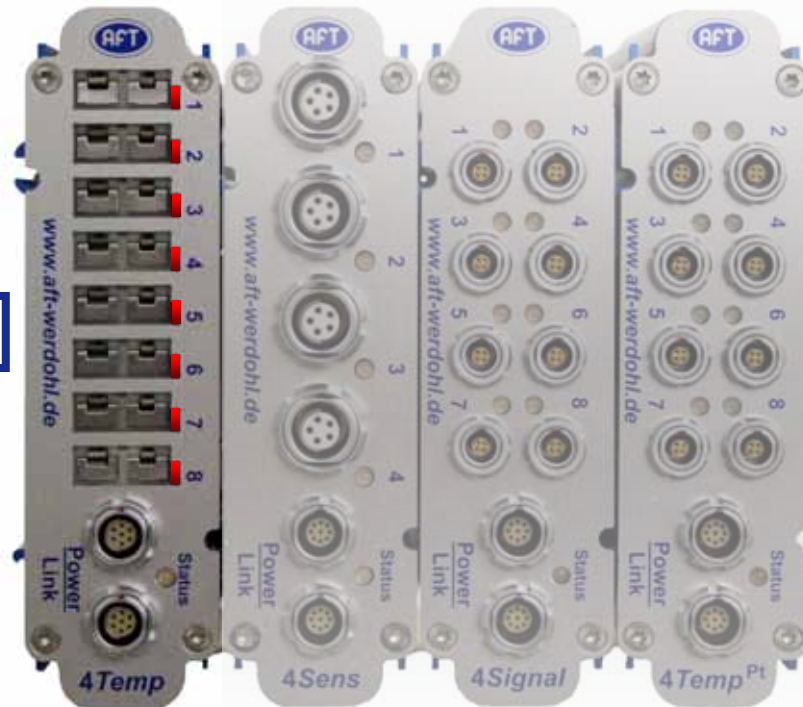
# 4Measure – System Overview





## Channel-Individual Status Display

100 Hz Sampling Rate

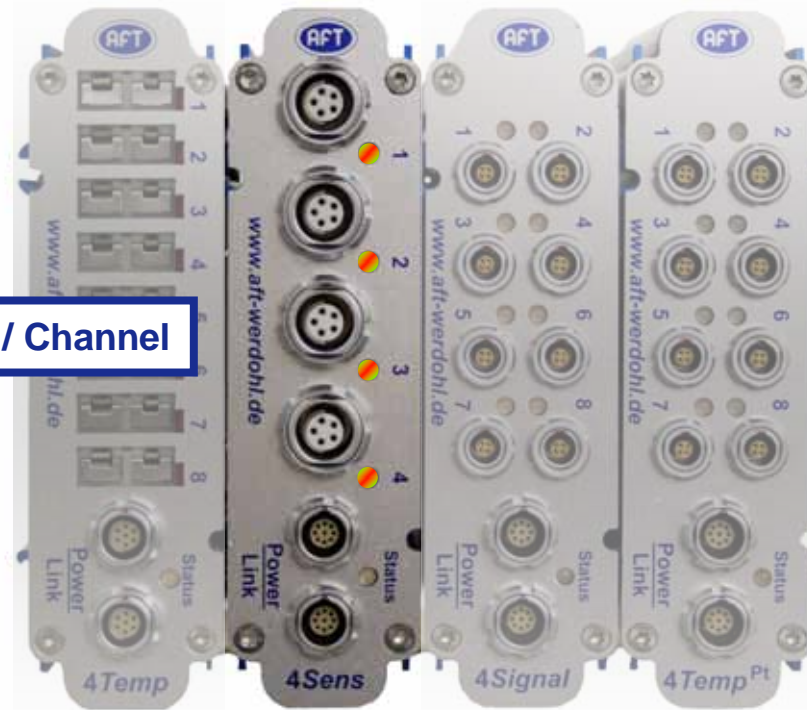


min. Low-Pass Behaviour → max. Dynamics





## Channel-Individual Status Display

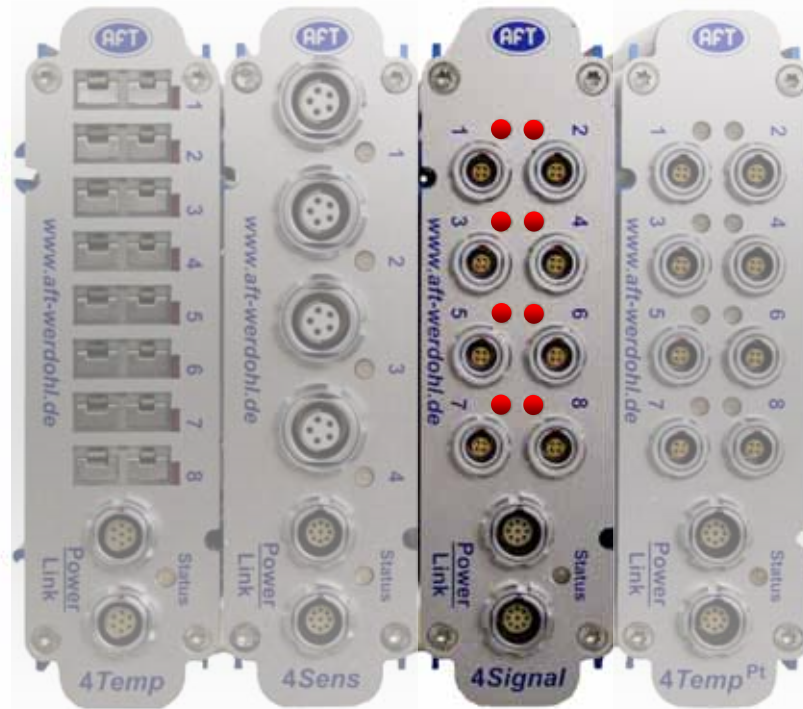


Sampling Rate 10 kHz / Channel

## Step-less Configurable Sensor Supply



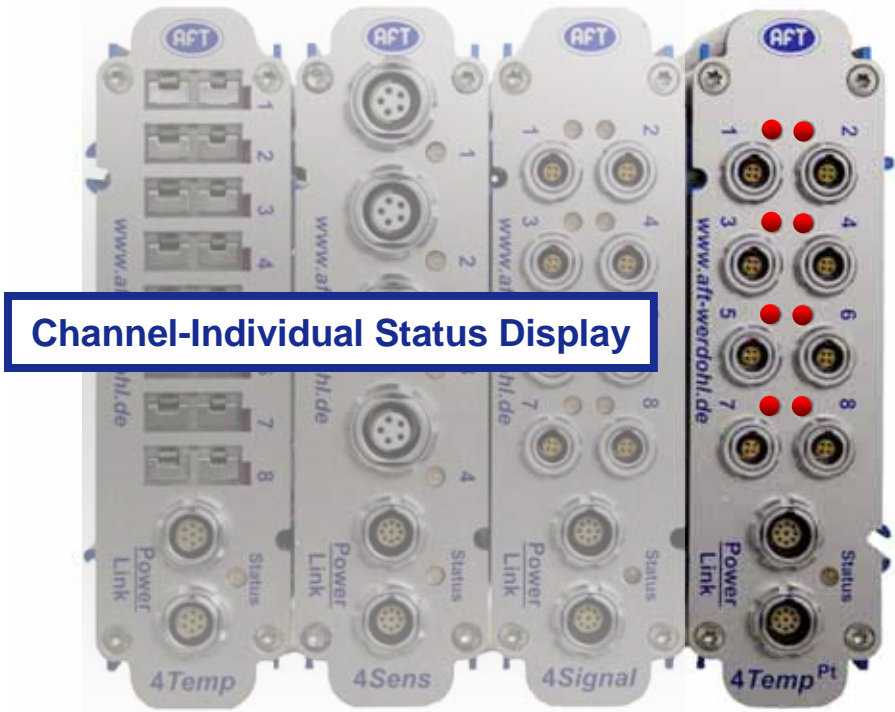
Optical Display for  
Limit Value Monitoring



Channel-Individual Status Display



Supports Pt100, Pt200, Pt500, Pt1000



Prepared for 2, 3 – 4 Wire Technology





# Overview – All Satellites



Most Efficient Combination of Design / Function / Price / Support

Terminal 15 Control Input

Most Compact Design

Ergonomic, Intuitive  
User Interface

Precise

Tool-Less Combination /  
Disassembly possible

Only Front-Panel Use



Multicoloured Device Status Display  
incl. CAN Diagnosis

# Requirements of a Datalogger

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# Requirements of a Datalogger

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- **Modular design**
- **Preprocessing of measurement data in datalogger**
- **Completely autarkic system, which runs without driver intervention**
- **Measurement data should be available during or directly after test drive**
- **Connections compatible to other manufacturers**
- **Smallest required installation space**
- **Easy to use with intuitive configuration**
- **Application Programming Interface (API) for integration of additional algorithms into the datalogger**

# The Result → Automotive Datalogger 4Log



Voltage Drop Protection

Operating Status Display

Quick-Start



Control Inputs  
Level / Edge Sensitive,  
Switch Threshold Configurable

Digital-In Switch Threshold,  
Channel-Individual Configurable





## Channel-Individual Status Display



Switchable Terminating Resistor

HS/LS Switch

Wake-On-Ring / LIN possible

Channel-Individual Status Display



Voltage Supply for GPS-Receiver  
Without Additional Cabling

# Overview 4Log



Programming Interface  
for Individual Use

Equippable Options ,  
e.g. WLAN, CF-Card

Extensive Software  
Functions Integrated



Proven Time &  
Classification Operations

Mass Storage  
Connectable via USB

Modular & Therefore  
Project-Specific



Automatic WLAN  
Data Exchange



Measurement Configuration  
Exchange via WLAN



# Why Customers Choose AFT

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## Why are we “so close to the market“ with our products?

- **Because our Engineers are in the Development Centers of the OEMs**
- **Because we listen directly to the customers & users to hear what they want, what they need, what’s good and what’s not**
- **On-Site Support for first initialisations or problems during measurement**
- **Because we directly experience what the future trends are**
- **Because we get to hear first which measurement tasks our customers will have in the future**
- **We develop our products with the users. Our Beta versions are always tested by end-users. Feedback goes straight into the development**
- **This means we usually have a headstart on our competitors**





Thank you for listening !



For further questions  
and discussions,  
please visit us at

**Hall 1**

**Booth 1298**