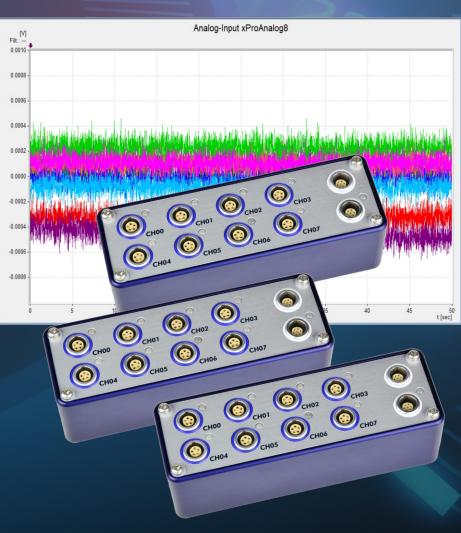
## **Suchy Data Systems**

# xproAnalog8

### accessing the Analog World





Signal Conditioning with 24 Bit Resolution and +/-20 V Input Range

clever Testing with XPro

### Automotive Test Equipment —— Suchy Data Systems —



# xproAnalog8

accessing Analog Signals via CAN, 24-bit resolution - modularly expandable

### xproAnalog8

#### converting 8 Analog Channels into CAN Messages

Make the right decision with xpro Analog8 when it comes to high resolution analog signal acquisition!

The use of the latest state-of-the-art components enables the electronics to be accommodated in an extremely compact and lightweight aluminum housing.

Status LEDs indicate the operating status of the individual measurement channels. An additional LED signals activities on the CAN bus.



Multiple 24-bit sigma-delta converters resolve with as low as  $40\mu V$ , whereby noise-free results are usually less than 1 mV.

All inputs are of the "differential" type, which as far as possible avoids ground loops.

The extra wide input range is +/-20V and thus covers all standard voltages in a vehicle with an on-board supply of

#### Sensor Supply 5V / 12V on each Signal Input Socket

Each of the input sockets provides a stabilized supply of 5V and 12V to the individual sensors.

Therefore an additional external power supply for the sensors is not required.

The maximum current drawn per channel is 10mA. This current is sufficient to supply low-power sensor electronics.

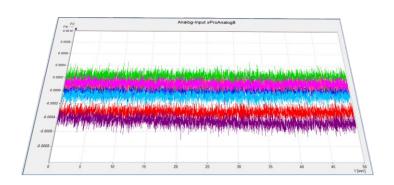
#### Communication via CAN Bus + Chaining of Modules

xproAnalog8 sends converted siganl values to a higherlevel data logger via CAN. Scaling and identifier information are taken from the supplied .dbc file.

Up to 8 modules can be chained, thus allowing up to 64 channels to be transmitted via a single CAN interface.

All individual channels are sampled at a fixed data rate of 100 Hz.

Even with maximum channel expansion, this ensures that the permissible bus load of the CAN is not exceeded.





#### **Technical Data**

#### **Power Supply**

- Input Range of Power Supply 9 ... 32 VDC @ ca. 60 mA
- galvanically isolated against Vehicle Power
- electronic Fuse and EMI Protection
- Protection against wrong Polarity

#### **CAN-Bus Communication**

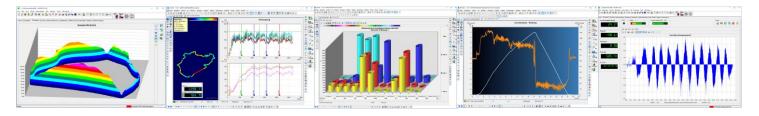
- CAN 2.0B with 500 kBit/s or 1 MBit/s
- higher Data Rates with CAN-FD (coming soon)
- Sensor and Power Connection via Push-Pull sockets
- Settable Terminating Resistor 120 Ohm

#### **Add-on Features**

- individual Status-LED for each Input Channel
- Status LED to signal activities on CAN Bus
- USB-Interface to set Parameters and load Updates
- integrated CAN-Hub to add additional Modules

#### **Dimensions and Weight**

- Sturdy and extremely compact Aluminum Housing
- Dimensions 117 \* 39 \* 35 mm
- Weight appx. 200 g
- Temperature Range -40 ... +80 C°



clever Testing with xpro<sup>©</sup> Automotive Systems