



V1.5

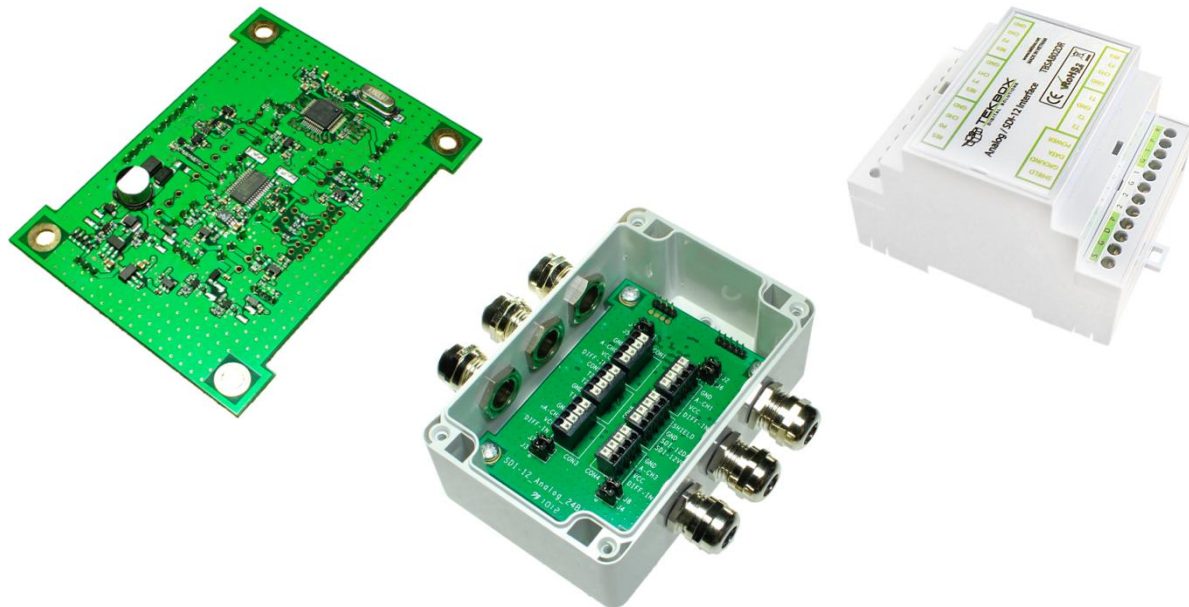
## TBSAB02 / TBSAB02DR - 24 Bit Analogue to SDI-12 Interface

The TBSAB02/TBSAB02DR are 4+1 channel analogue to SDI-12 interfaces for 24 Bit A/D conversion of sensor signals. A/D conversion and configuration is controlled via SDI-12 commands. The interfaces are equipped with signal conditioning circuits which can be customized for various input voltage ranges. It offers low current consumption and is available in a Fibox PC081206 IP67 rated housing and in a DIN-rail housing.

Each channel can be independently scaled with a 3<sup>rd</sup> order polynomial to enable gain and offset calibration of the connected sensors.

A built in 3 wire interface for direct connection of PT100/PT1000 offers additional versatility.

The TBSAB02 / TBSAB02DR provide digital signals for the power management of the connected sensors. Four on-board, SDI-12 controlled high side FET- switches are provided to power on/off connected sensors.



TBSAB02(DR) 4+1 Channel Analog to SDI-12 Interface

### Features

- ANALOGUE to SDI-12 interface
- 4+1 24 Bit Sigma Delta ADC channels
- 4 analogue inputs; configurable as 4-20mA current loop or 0-2,5V voltage inputs; other voltage ranges upon order
- Input over-voltage protection
- 3-wire PT100/1000 interface
- Configurable sensor power management signal for each channel
- Configurable slope and offset for each channel
- $\pm 0,025\%$ , 2ppm/ $^{\circ}\text{C}$  reference voltage
- Chopper stabilized buffer for low offset

- 50Hz & 60Hz line rejection filter
- SDI - 12 standard V1.3
- Plug and play
- 6 - 16V supply voltage
- 80 mm x 120 mm x 57mm
- IP67 housing – Fibox PC081206
- Alternatively available in Din-rail housing
- Operating temperature range: - 40 $^{\circ}\text{C}$  ... + 85 $^{\circ}\text{C}$

### Target Applications

- SDI-12 Sensor Networks