

SDI-12 to Analogue Interface Board

The TBS02A-IFB is an 8 channel SDI-12 to analogue interface board for A/D conversion of sensor signals, primarily designed as evaluation board for the TBS02A module. A/D conversion and configuration of the board is controlled via SDI-12 commands. The interface board is equipped with signal conditioning circuits for various input voltage ranges. It offers low current consumption and is built to fit into an off the shelf IP67 housing.

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

A built in thermal sensor offers additional versatility.

The TBS02A IFB provides digital signals for the power management of the connected sensors. Two on board, high side FET- switches can be routed to any control signal and used to power on/off connected sensors.



TBS02A-IFB 8 Channel Analog to SDI-12 Interface Board

Features

- SDI-12 / ANALOGUE Interface
- 8 x 12 Bit ADC channels
- 7 single ended and 1 differential input
- 1 x 0...1V, 2x 0...2.5V, 2 x 0...5V, 1 x 0...10V, 1 x 0...2.5V unconditioned, 1 x differential / current loop inputs
- Input over-voltage protection
- Integrated 12 Bit temperature sensor
- Configurable sensor power management signal for each channel

- Configurable slope and offset for each channel
- Power down mode
- SDI-12 V1.3
- 6-16V supply voltage
- 94mm x 71mm x 13mm
- Compatible with Fibox PC081206 housing
- Operating temperature range:
 - -40°C ... +85°C

Target Applications

SDI-12 sensor networks