



GLET-SG2K-BA2-BI7

Active modular enclosure with 2 channel strain gauge amplifier

- Connection via BNC and jack
- Supply voltage: 24 VDC $\pm 5\%$
- Dimension: 45 x 115 x 90 mm

Active modular enclosure for the connection of passive strain gauge transducers / sensors (bridge resistance more than 350 Ohm) in connection with a datalogger.

- Number of measuring channels: 2
- Potentiometers for zero and span adjustment
- Strain gauge excitation: 5 VDC (max. 15 mA/channel)
- Input sensitivity: 1 ... 3 mV/V
- Limit frequency: 1 kHz
- Connector for transducer: 7-pin connector (Binder, supplied with mating)
- Analog output signal: 0 ... 10 V, ± 10 V
- Analog output rating: max. 1 mA
- Electrical connection analog output to datalogger: 2 mm jack
- Supply voltage: 24 VDC $\pm 5\%$ *)
- Enclosure: desktop
- Dimension without connectors (WxHxD): approx. 45 x 115 x 90 mm
- Environmental sealing: IP20
- Operating temperature range: 0 ... +50 °C

8B-Messverstärkermodule:

Please see detailed specification for the 8B-module amplifiers in their respective datasheets.

General specification:

- 1500 Vrms isolation
- 240 Vrms input protection
- -40 ... +85 °C operating temperature range



GLET-8B4K-BA2-BI5

Active modular enclosure with base rack for up to 4 8B-module amplifiers

- Connection via connector and jack
- Supply voltage: 24 VDC $\pm 5\%$
- Dimension: 74 x 115 x 175 mm

Active modular enclosure with base rack for up to 4 8B-module amplifiers

- Connector for transducer: 5-pin connector (Binder, supplied with mating connector)
- Electrical connection analog output to datalogger: 2 mm jack
- Supply voltage: 24 VDC $\pm 5\%$ *)
- Enclosure: desktop
- Dimension without connections (WxHxD): approx. 74 x 115 x 175 mm
- Environmental sealing: IP20
- Operating temperature range: 0 ... +50°



DI-8B-32 / DI-8B-42 Current input modules

The amplifier modules DI-8B-32/-42 convert commonly used 4 ... 20 mA current signals to a proportional analog output voltage signal of 1 ... 5 V or 2 ... 10 V. Additionally, an isolated 15 V loop supply voltage (DI-8B42 only) is provided for transmitter excitation. A highprecision resistance for plugging into the board is supplied with the module. The galvanic isolation reduces noises and the effect of ground loops, which is barely avoidable in large and complex measuring setups.

DI-8B-34 Linearized 2- or 3-wire RTD modules

The amplifier modules DI-8B-34 are designed for Pt100 sensor excitation and signal conditioning. The Pt100 resistance value varies with the temperature, i. e. the module with Pt100 sensor provides an output voltage of 0 ... 5 V proportional to the temperature. Since the resistance gradient over temperature is not a linear line, the signal is linearized by the module.

DI-8B-35 Linearized 4-wire RTD modules

The amplifier modules DI-8B-35 are designed for Pt100 sensor excitation and signal conditioning. The Pt100 resistance value varies with the temperature, i. e. the module with Pt100 sensor provides an output voltage of 0 ... 5 V proportional to the temperature. Since the resistance gradient over temperature is not a linear line, the signal is linearized by the module.

DI-8B-36 Potentiometer input module

The module amplifier DI-8B-36 (potentiometer input module) filters, isolates, amplifies a single potentiometer input and provides an analog output signal (0 ... 5 V). This voltage output is controlled by a TTL logic input. The DI-8B-36 modules are designed with a completely isolated output circuit. The potentiometer excitation is provided by using two matched current sources. When using a 3-wire potentiometer, this method allows canceling the effects of lead resistances. The excitation currents are small which minimizes the self-heating of the potentiometer.

DI-8B-38 Strain gauge input module

Each module amplifier DI-8B-38 (strain gauge input module) is a single input channel, which is filtered, isolated, amplified and converted to an analog output signal (0...5 V or $\pm 5V$). These modules can interface to full- or half-bridge strain gauges with a resistance of 100 ... 10000 Ohm or 300 ... 10000 Ohm. The bridge excitation is provided from the module with a stable 3.33 V or 10 V voltage source.

DI-8B-32 / DI-8B-42 overview:

- input 4 ... 20 mA
- sensor excitation 15 VDC (DI-8B-42 only)
- output +1 ... +5 V or +2 ...+10 V
- common mode rejection 100 dB
- accuracy ± 0.05 %
- linearity ± 0.02 %
- bandwidth 100 Hz
- supply voltage +5 V

DI-8B-34 overview:

- PT100 sensor input 2-,3-wire
- output 0 ... 5 V
- common mode rejection 120 dB
- accuracy ± 0.05 %
- linearity ± 0.02 %
- bandwidth 3 Hz
- input resistance <30 Ohm
- supply voltage +5 V

DI-8B-35 Fakten:

- interface to 100 Ohm platinum resistance thermometer, 4-wire
- output 0 ... 5 V
- common mode rejection 120 dB
- accuracy ± 0.20 °C
- bandwidth 4 Hz
- input resistance 50 MOhm
- supply voltage +5 V

DI-8B-36 Fakten:

- interface to potentiometers up to 10000 Ohm
- output 0 ... 5 V
- common mode rejection 120 dB
- accuracy ± 0.05 %
- linearity 0.02 %
- bandwidth 3 Hz
- input resistance 50 MOhm
- supply voltage ± 5 V

DI-8B-38 overview:

- interface to full or half bridges
- bridge excitation 3.33 V or 10.00 V
- bridge resistance 100 ... 20000 Ohm or 300 ... 20000 Ohm
- output ± 5 V
- isolation 1500 Vrms
- input protection 240 Vrms
- common mode rejection 100 dB
- accuracy ± 0.05 %
- linearity 0.02 %
- bandwidth 3 kHz
- input resistance 50 MOhm
- supply voltage +5 V



■ DI-8B-45 Frequency input module

Each frequency input module DI-8B-45 converts the applied input frequency (0 ... 500 Hz to 0 ... 100 kHz) to a galvanic isolated output voltage of 0 ... 5 V. The frequency input signal can be a TTL signal or a signal with zero-crossing, but these input signals have to be connected in different ways. The galvanic isolation reduces noises and the effect of ground loops, which is barely avoidable in large and complex measuring setups.

Preview – further GLET Accessories:

- GLET-B514-KA-bat: Additional battery block for a longer power-supply-independent operation (GL2/8/900)
- GLET-TCmini-TMEBx-KA: Interface box with mini connector for thermocouples (GL2/8/900)
- GLET-SU...: Version with bi-directional supply ± 15 VDC

Customised versions available on request.

*) For voltage supply the datalogger's AC-adaptor can be used. The unit provides a jack for AC-adaptor connection, as well as a datalogger supply cable (comparable to B-514). For use with multiple GLET units an additional AC-adaptor is required.

Due to continual product development, ALTHEN and partners reserve the right to vary the foregoing details without prior notice.

DI-8B-45 overview:

- input 0 ... 500 Hz to 0 ... 100 kHz
- output 0 ... 5 V
- common mode rejection 100 dB
- accuracy ± 0.10 %
- linearity ± 0.05 %
- supply voltage +5 V