DIINNO

# BAB-01

Communication adapter – secure connection of modern metering devices to the SMGw




The BAB-01 connects modern metering devices (mME) to a Smart Meter Gateway and meets the security requirements of the Technical Guideline BSI TR-03109 and of PTB-A 50.8 for communication with the SMGw. Only this secure integration into a communication network makes a meter a modern metering device within the meaning of the MsbG. The adapter transfers the data between meter and gateway in compliance with the standards and is certified on the basis of latency measurement and type examination.

**3 × RJ12**
2 × LMN bus, 1 × mME

**BSI TR-03109**
SMGw security requirements

**PTB-A 50.8**
Legal metrology requirements

**DE-M**
Type examination, module B

## Ordering information

| Type | Meter | mME interface | Delivery form |
|---|---|---|---|
| BAB-01 | DTZ541 · DDZ285 (three-point) | RS485 (type B) or RS232 (type C) | Glued into the transparent terminal cover, set with terminal cover |
| BAB-01 | EHZ541 (eHZ) | OKK-485 (recommended) or OKK-232 | Single device |

Only the device combination of BAB-01 and a meter of type DTZ541, DDZ285 or EHZ541 with the respectively approved software versions is permitted. Packaging unit: on request.

## Technical data

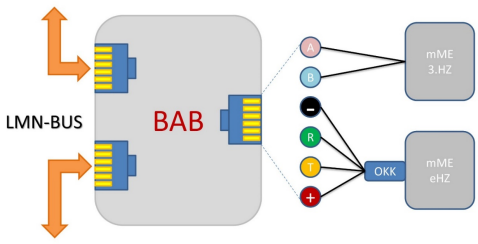
### Interfaces

| | |
|---|---|
| Connections | 3 × RJ12 socket (6P6C): 2 × LMN bus to the SMGw, 1 × mME |
| Power supply | 12 V via the LMN bus |
| mME assignment – RS485 | Pins 1 and 6 → terminals 27 (A) and 28 (B) of the meter (DTZ541, DDZ285) |
| mME assignment – RS232 | Pins 2–5 → DTZ541 / DDZ285 (type C) or OKK-232 (EHZ541) |
| Parameterisation | None – the adapter parameters cannot be changed |
| Protocol | According to BSI TR-03109, PTB-A 50.8, FNN specification |

### Environmental conditions and mechanics

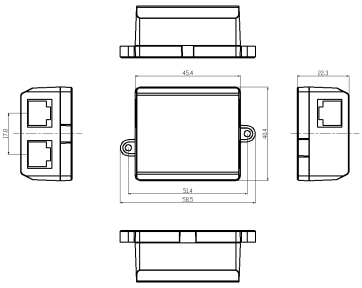
| | |
|---|---|
| Temperature range | –25 °C … +55 °C (operation) |
| Housing | Glued shut, cannot be opened without destruction |
| Dimensions (L × W × H) | 58.5 × 40.4 × 22.3 mm |
| Fastening | Two lugs; glued into the terminal cover on DTZ541 / DDZ285 |
| Rating plate | Laser-marked on the terminal cover · 2D barcode according to FNN-TH 2D barcode |
| Installation | Only by a certified qualified electrician |
| User seal | Sealing of the terminal cover |

## Connection diagram




LMN bus (2 × RJ12) to the Smart Meter Gateway · mME interface: RS485 A/B or RS232 to the DTZ541 / DDZ285, via OKK-485/OKK-232 to the EHZ541. Before sealing the terminal cover, plug in only the LMN bus cable.

## Dimensional drawing



Dimensions in mm. Length 58.5 mm including mounting lugs.

## Standards & conformity

| | |
|---|---|
| Type-examination certificate (module B) | DE MTP 18 B 006 M · valid until 18.12.2028 |
| Security requirements | BSI TR-03109 (Smart Meter Gateway) |
| Legal metrology | PTB-A 50.8 · certified on the basis of latency measurement |
| Data interfaces | FNN specification, FNN-TH 2D barcode |
| Permitted device combination | BAB-01 with DTZ541 / DDZ285 (RS485 or RS232) or EHZ541 – each with approved software versions |

CE · DE-M · BSI TR-03109 · PTB-A 50.8

The EU declaration of conformity is available as a separate document. Manufacturer: Holley Technology Ltd., Hangzhou/China. Importer: Holley Technologie GmbH, Ketzin/Havel. Distribution in Germany: DIINNO GmbH, Berlin.

## Accessories

| | |
|---|---|
| DTZ541 / DDZ285 | Three-point meters – connection via RS485 (type B) or RS232 (type C) |
| EHZ541 | Three-phase meter in eHZ plug-in design – connection via OKK-485 (recommended) or OKK-232 |
| OKK-485 / OKK-232 | Optical heads for the EHZ541: OKK-485 (RS485, RJ12, direct) or OKK-232 (RS232, RJ10, with adapter) |
| LMN bus cable | RJ12 connection to the Smart Meter Gateway (LMN-BK / LMN-BKF) |

## Disposal

In accordance with Directive 2012/19/EU (WEEE), the adapter must not be disposed of with household waste at the end of its service life. The device must be collected separately and recycled in an environmentally sound manner.