

## JXM-IO-E32

### Expansion module for mobile machinery

#### Short description

The expansion module JXM-IO-E32 is the universal building block for remote I/Os on self-propelled machines. With its I/O configuration focused on inputs, it can handle a wide range of decentralized tasks and is particularly suitable for integrating temperature and high-resolution pressure sensors in self-propelled machines.

Communication with the JXM-IO-E32 takes place via CANopen®. This lets you integrate the module into conventional CAN networks used on self-propelled machines.

Thanks to its potted components and rugged housing the expansion module is applicable in any situation even under harsh environmental conditions.



#### Features

- 16 inputs and 3 diagnostic-capable outputs - including analog inputs and high-resolution sensor inputs
- Eight temperature sensor inputs for PT1000 sensors provide increased application flexibility
- Thanks to CAN ID addressing via tri-state inputs, up to nine nodes in a network are supported without the need for software configuration. This lets you implement your common parts strategy.
- Minimized cabling effort: Each of the ten analog inputs has both a pin with supply voltage and a pin with ground reference.
- Three analog outputs (current and voltage) can be used to control pneumatic valves, for example
- Rugged housing with potted components, as well as automotive connector

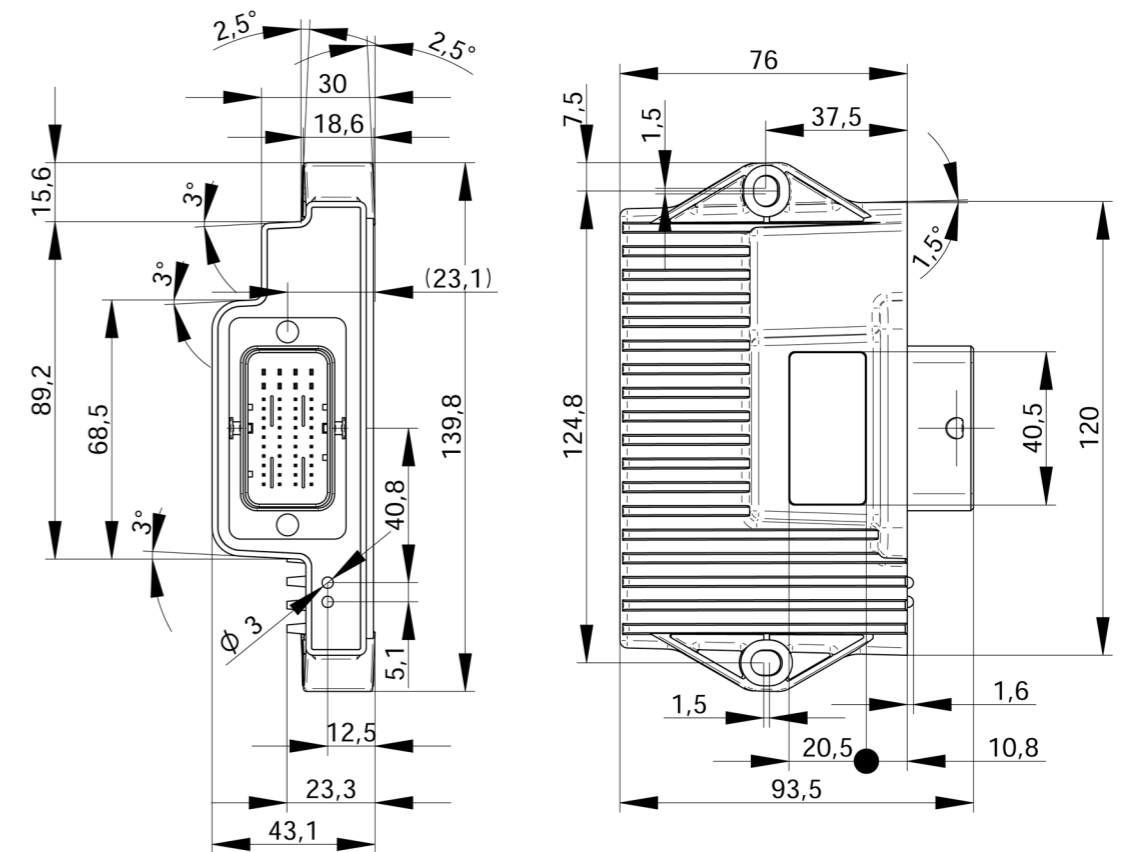
# JXM-IO-E32

## Technical data

| JXM-IO-E32   |  |
|--|--|
| Operating voltage  | DC 8 ... 32 V, with separate ECU power supply  |
| Operating/storage temperature                                | -40 °C ... +85 °C  |
| CAN ports  | 1 CANopen®   |
| Max. amount of inputs/outputs                                | 19   |
| Inputs   |  |
| Analog   | 8; 0 ... 10 V/0 ... 20 mA, can be configured individually; Resolution: 12 bits, input impedance: 43 kΩ, load 120 Ω; 2; 0 ... 20 mA, can be configured individually; Resolution: 16 bits, input impedance 47 kΩ, load 120 Ω |
| Temperature sensor inputs                                    | 8; PT1000 (switched via analog inputs)   |
| Digital / frequency  | 6; Input impedance 5.6 kΩ, 0.1 Hz ... 10 kHz; switchable between NPN/PNP   |
| Digital / CAN-coding   | 2; Coding of the CAN ID: tristate  |
| Outputs with diagnostics capability (short-circuit, no-load) |  |
| Analog   | 3; 0 ... 10 V / 0 ... 20 mA, can be configured individually; Resolution: 12 bits   |
| Power supply - Sensors                                       | 8 x 24 V sensor supplies VBAT; 2 x 10 V sensor supplies with reference voltage   |
| Ground reference   | 10 x sensor ground   |
| Max. permitted total current                                 | 2:00 AM  |
| Degree of protection   | IP66   |
| Vibration  | ISO 16750-3  |
| Shock  | ISO 16750-3  |
| Protection against polarity reversal                         | Yes  |
| Certifications   | E1 (ECE R10), CE ISO 14982   |
| Output diagnostics   | Short circuit, no-load   |

Further details and order information are available on request. Specifications are subject to change without notice. Errors and omissions excepted.

## Dimensional drawing



# JXM-IO-E32

## Connector pinout

| JXM-IO-E32 |    |
|------------|----|
| CAN1_H     | A1 |
| CAN1_L     | B1 |
| AI_1       | C1 |
| AI_2       | D1 |
| AI_3       | E1 |
| AI_4       | F1 |
| AI_5       | G1 |
| AI_6       | H1 |
| AI_7       | J1 |
| AI_8       | K1 |
| AI_PREC_1  | L1 |
| AI_PREC_2  | M1 |
| CAN1_TERM2 | A2 |
| CAN1_TERM1 | B2 |
| VEXT_SEN_1 | C2 |
| VEXT_SEN_2 | D2 |
| VEXT_SEN_3 | E2 |
| VEXT_SEN_4 | F2 |
| VEXT_SEN_5 | G2 |
| VEXT_SEN_6 | H2 |
| VEXT_SEN_7 | J2 |
| GND_SEN    | K2 |
| VREF_10V_1 | L2 |
| VREF_10V_2 | M2 |

| JXM-IO-E32  |    |
|-------------|----|
| n.c. (BOOT) | A3 |
| AO_3        | B3 |
| GND_SEN     | C3 |
| GND_SEN     | D3 |
| GND_SEN     | E3 |
| GND_SEN     | F3 |
| GND_SEN     | G3 |
| GND_SEN     | H3 |
| GND_SEN     | J3 |
| VBAT ECU    | K3 |
| GND_SEN     | L3 |
| GND_SEN     | M3 |
| DI_1        | A4 |
| DI_2        | B4 |
| DI_3        | C4 |
| DI_4        | D4 |
| DI_5        | E4 |
| DI_6        | F4 |
| AO_1        | G4 |
| AO_2        | H4 |
| IN_CFG1     | J4 |
| OUT_CFG2    | K4 |
| VEXT_SEN_8  | L4 |
| GND         | M4 |

