BUCHER automation

JXM-IO-E32

I/O module



- 14 inputs, and 3 outputs with diagnostic capabilities – including analog inputs and high-resolution sensor inputs
- Improved application versatility thanks to 8 PT1000 thermal sensor inputs
- CAN ID addressing via tri-state inputs allows for integration of up to 9 nodes in one network without software configuration, and testifies to the common part strategy
- Minimal wiring effort: Each of the 10 analog inputs is assigned a supply voltage pin and a ground reference pin
- 3 analog outputs (current and voltage) can be used to control pneumatic valves, for example
- Sturdy potted housing featuring a field-proven automotive connector

Description

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

Communication with the JXM-IO-E32 takes place via CANopen. This allows for integration into conventional CAN networks used in mobile machinery.

Featuring a sturdy potted housing, the expansion module is designed to perform reliably even in the harshest operating environments.

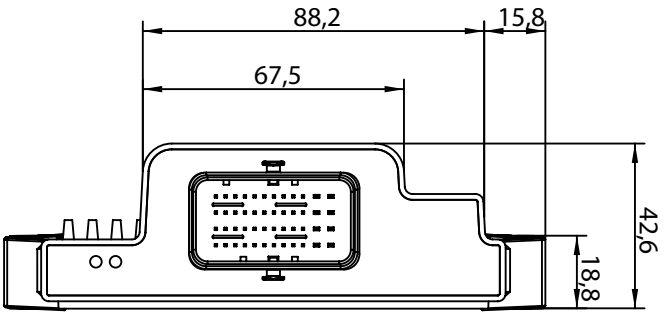
Technical specifications

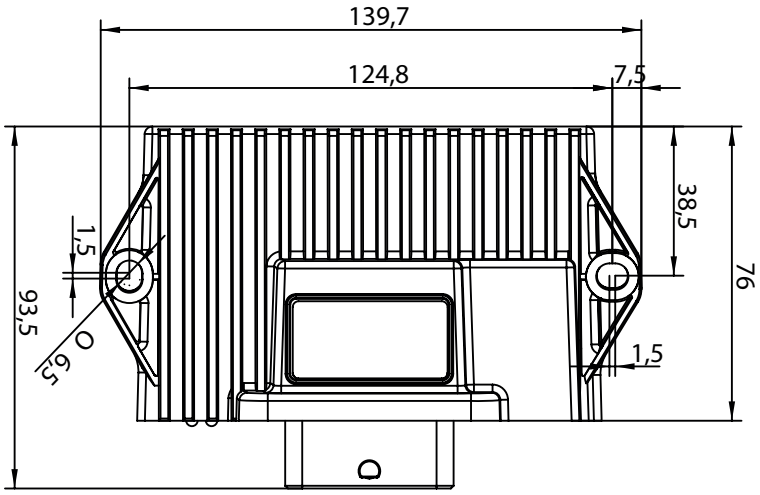
Operating voltage range	DC 8 V ... 32 V, with separate ECU power supply
Operating/storage temperature	-40 °C ... +85 °C
CAN ports	1 CANopen
Max. amount of inputs/outputs	17
Inputs	
Analog	8; 0 ... 10 V/0 ... 20 mA, can be configured individually, resolution: 12 bits, input impedance: 43 kΩ, load resistor: 120 Ω 2; 0 ... 20 mA, can be configured individually; resolution: 16 bits, input impedance: 47 kΩ, load resistor: 120 Ω
Thermal sensor inputs	8; PT1000 (switched via analog inputs)
Digital/frequency	6; input impedance 5.6 kΩ, 0.1 Hz ... 10 kHz; switchable NPN/PNP input
Digital / CAN coding	2; Coding of the CAN ID, tri-state
Outputs with diagnostic capabilities (short-circuit, cable break)	
Analog	3; 0 ... 10 V/0 ... 20 mA, can be configured individually; resolution: 12 bits
Sensor power supply	8 x 24 V sensor supply, battery voltage 2 x 10 V sensor supply, reference voltage
Ground	10 x sensor ground
Max. permitted total current	2 A
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

Pinout

CAN1_H – CAN high signal	A1
CAN1_L – CAN low signal	B1
AI_1 – analog input	C1
AI_2 – analog input	D1
AI_3 – analog input	E1
AI_4 – analog input	F1
AI_5 – analog input	G1
AI_6 – analog input	H1
AI_7 – analog input	J1
AI_8 – analog input	K1
AI_PREC_1 – 16 bits	L1
AI_PREC_2 – 16 bits	M1
CAN1_TERM2 – CAN termination	A2
CAN1_TERM1 – CAN termination	B2
VEXT_SEN_1 – sensor supply	C2
VEXT_SEN_2 – sensor supply	D2
VEXT_SEN_3 – sensor supply	E2
VEXT_SEN_4 – sensor supply	F2
VEXT_SEN_5 – sensor supply	G2
VEXT_SEN_6 – sensor supply	H2
VEXT_SEN_7 – sensor supply	J2
GND_SEN – ground for sensor supply	K2
VREF_10V_1 – sensor supply, reference voltage	L2
VREF_10V_2 – sensor supply, reference voltage	M2
n.c. (BOOT)	A3
AO_3 – analog output	B3
GND_SEN – ground for sensor supply	C3
GND_SEN – ground for sensor supply	D3
GND_SEN – ground for sensor supply	E3
GND_SEN – ground for sensor supply	F3
GND_SEN – ground for sensor supply	G3
GND_SEN – ground for sensor supply	H3
GND_SEN – ground for sensor supply	J3
VBAT ECU – logic circuit supply	K3
GND_SEN – ground for sensor supply	L3
GND_SEN – ground for sensor supply	M3
DI_1 – Digital and frequency input	A4
DI_2 – Digital and frequency input	B4
DI_3 – Digital and frequency input	C4
DI_4 – Digital and frequency input	D4
DI_5 – Digital and frequency input	E4
DI_6 – Digital and frequency input	F4
AO_1 – analog output	G4
AO_2 – analog output	H4
IN_CFG1 – CAN ID configuration pin	J4
OUT_CFG2 – CAN ID configuration pin	K4
VEXT_SEN_8 – sensor supply	L4
GND – ground for power outputs	M4

Dimensional drawing





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

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