

JXM-IO-EX30

Extension module for mobile machinery

Short description

The JXM-IO-EX30 expansion module with its innovative cabling concept is the universal distributed component for self-propelled machines. With its balanced I/O configuration, it can handle almost all distributed tasks.

Communication with the JXM-IO-EX30 takes place via CANopen®. This allows for integration into conventional CAN networks used in self-propelled machines.

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

The cabling concept based on 4-pin DT connectors enables fast plug&play field cabling using standard cables.



Features

- 12 inputs and 14 diagnostics-capable outputs - including high current paths and PWM with current control
- Thanks to CAN ID addressing via tri-state inputs, up to 9 nodes in a network are supported without the need for software configuration. This lets you implement your common parts strategy.
- High individual currents at the outputs allow parallel connection of several loads
- 3 short-circuit-proof sensor supplies allow „mission critical“ sensor networks
- Rugged potted housing with plug&play cabling concept

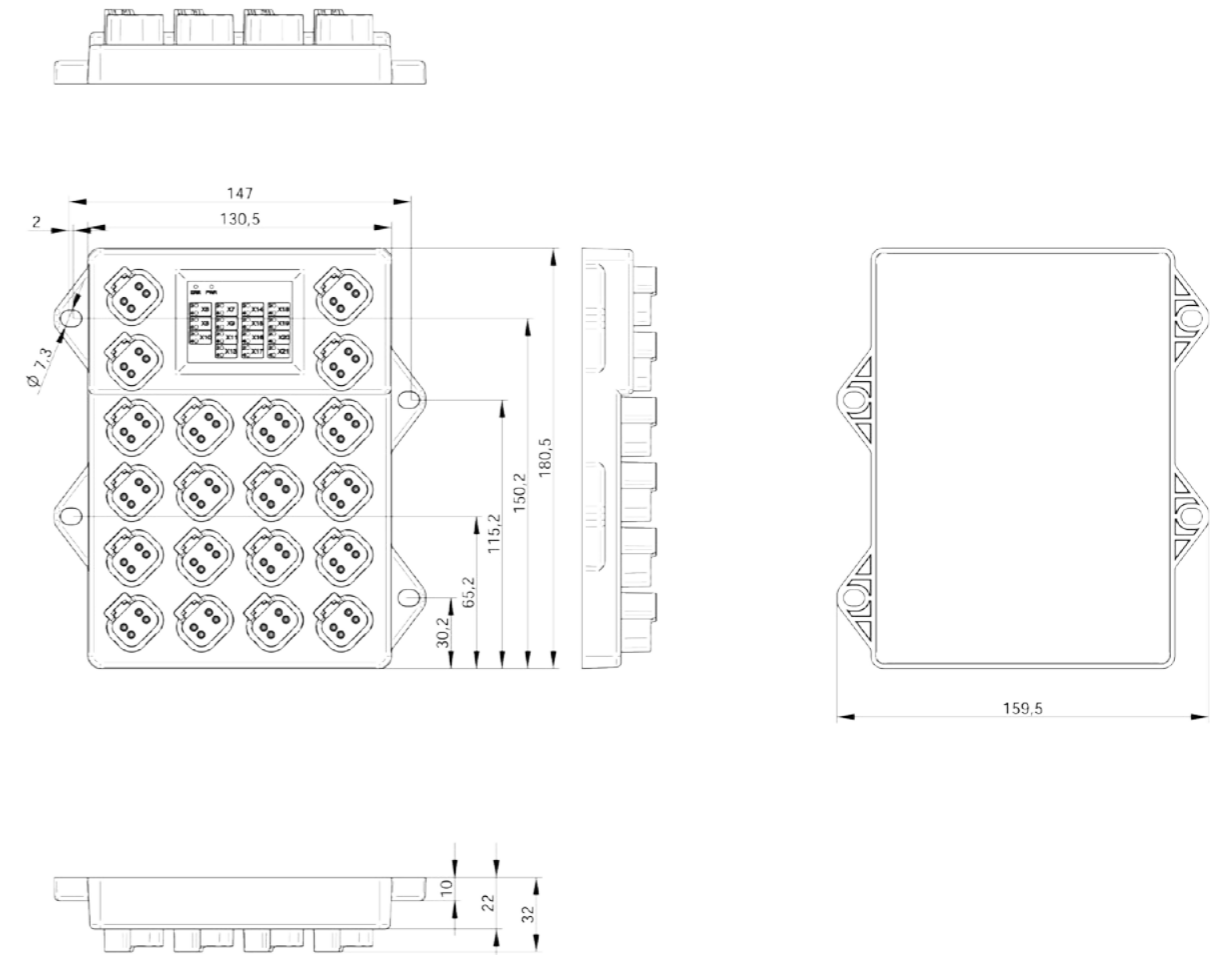
JXM-IO-EX30

Technical data

Operating voltage range	DC 8 ... 32 V, ECU voltage supplied separately
Operating/storage temperature range	-40 ... +85 °C
CAN Interfaces	1 CANopen®
Maximum number of inputs/outputs	26
Inputs	
Analog	8; 0 ... 10 V/0 ... 20 mA, can be configured individually; resolution: 12 bit, input impedance 35 kΩ, load resistor 120 Ω
Digital/frequency	4 active-high, input impedance; 5.6 kΩ, 0.1 Hz ... 10 kHz
Digital/CAN coding	2 CAN ID coding, tri-state
Outputs with diagnostics capability (short-circuit, no-load)	
PWM, precision current measurement	4; 3 A, max. 1.5 kHz, dithering, current controlled, diagnostics-capable, short-circuit proof; alternatively to be used as digital active-low input, input impedance 10 kΩ; digital output 3 A; PNP input
PWM	6; 7 A, max. 1.5 kHz, dithering, diagnostics capable, short-circuit-proof; alternatively to be used as digital active-low input, input impedance 10 kΩ; digital output 7 A; PNP input
Digital (50 % ON period)	4; 3 A high-side, diagnostics capable, short-circuit proof, (with 50 % ON period); alternatively to be used as digital active-low input, input impedance 10 kΩ; PNP input
Sensor supply	3 fused VBAT supplies for sensors
Maximum permissible total current	26 A
Degree of protection	IP65/IP6k9k with Jetter connectors
Vibration	ISO 16750-3
Shock	ISO 16750-3
Certifications	ECE R10 E1, CE ISO 14982, ISO 13766-2
Maximum installation height	2000 m (above sea level)
Reverse polarity protection	Yes, external fuse
Output diagnostics	Short-circuit, cable break

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

Dimensional drawing



JXM-IO-EX30

Connector pinout

JXM-IO-EX30 X1 - VBAT_OUT	
n.c.	1
VBAT_PWR	2
GND_PWR	3
GND_PWR	4

JXM-IO-EX30 X2 - VBAT_IN	
VBAT_PWR	1
VBAT_PWR	2
GND_PWR	3
GND_PWR	4

JXM-IO-EX30 X4 - CAN_IN	
VBAT_ECU	1
CAN_L	2
VBAT_ECU in Status BOOT/n.c. in Status Operational	3
CAN_H	4

JXM-IO-EX30 X5 - CAN_OUT	
VBAT_ECU	1
CAN_L	2
GND_PWR	3
CAN_H	4

JXM-IO-EX30 X6 - AI_1 ... AI_2	
VEXT_SEN_1	1
AI_1	2
GND_SEN	3
AI_2	4

JXM-IO-EX30 X7 - AI_3 ... AI_4	
VEXT_SEN_1	1
AI_3	2
GND_SEN	3
AI_4	4

JXM-IO-EX30 X8 - AI_5 ... AI_6	
VEXT_SEN_2	1
AI_5	2
GND_SEN	3
AI_6	4

JXM-IO-EX30 X9 - AI_7 ... AI_8	
VEXT_SEN_2	1
AI_7	2
GND_SEN	3
AI_8	4

JXM-IO-EX30 X10 - DI_P_1 ... DI_P_2	
VEXT_SEN_3	1
DI_P_1	2
GND_SEN	3
DI_P_2	4

JXM-IO-EX30 X11 - DI_P_3 ... DI_P_4	
VEXT_SEN_3	1
DI_P_3	2
GND_SEN	3
DI_P_4	4

Connector pinout

JXM-IO-EX30 X12 - CFG	
VBAT_ECU	1
CFG_1	2
GND_PWR	3
CFG_2	4

JXM-IO-EX30 X13 - PWM_H7_5	
VBAT_ECU	1
PWM_H7_5	2
GND_PWR	3
PWM_H7_5	4

JXM-IO-EX30 X14 - PWMi_H3_1 ... PW-Mi_H3_2	
VEXT_SEN_1	1
PWMi_H3_1	2
GND_PWR	3
PWMi_H3_2	4

JXM-IO-EX30 X15 - DO_H3_1 ... DO_H3_2	
VEXT_SEN_2	1
DO_H3_1	2
GND_PWR	3
DO_H3_2	4

JXM-IO-EX30 X16 - PWM_H7_3	
VEXT_SEN_3	1
PWM_H7_3	2
GND_PWR	3
PWM_H7_3	4

JXM-IO-EX30 X17 - PWM_H7_6	
VBAT_ECU	1
PWM_H7_6	2
GND_PWR	3
PWM_H7_6	4

JXM-IO-EX30 X18 - PWMi_H3_3 ... PW-Mi_H3_4	
VEXT_SEN_1	1
PWMi_H3_3	2
GND_PWR	3
PWMi_H3_4	4

JXM-IO-EX30 X19 - DO_H3_3 ... DO_H3_4	
VEXT_SEN_2	1
DO_H3_3	2
GND_PWR	3
DO_H3_4	4

JXM-IO-EX30 X20 - PWM_H7_4	
VEXT_SEN_3	1
PWM_H7_4	2
GND_PWR	3
PWM_H7_4	4

JXM-IO-EX30 X21 - PWM_H7_1 ... PWM_H7_2	
VBAT_ECU	1
PWM_H7_1	2
GND_PWR	3
PWM_H7_2	4

