



BAULDS IO MODULE - 2 SAFE

BIM - 2S

IEC 61508:2010 SIL 2
IEC 13849-1:2015 PLd
CANopen safety
Configurable IO

“The Baulds safety IO modules make your application safe, versatile and smart at the same time.”

The Baulds IO Module – 2 Safe (BIM-2S)

The BIM-2S is an IO module which can be used for safety application, it is controlled by a controller through CAN bus.

Decentralized IO module controlled by CAN bus

The BIM-2S can be installed right where sensors and actuators are located on a machine. This makes cabling easy as modules can be wired in series for CAN bus and power delivery (up to 13A).

Ruggedized design

The BIM-2S features an industrial housing made of durable plastics which are UL94-V0 certified and rated IP67. Furthermore it features standard M12 and DEUTSCH connectors.

Flexible and safe IO

The module features 2 analogue 0..20mA (NAMUR NE43) inputs and 10 safe industrial digital input/output combinations. This gives flexibility in the configuration of input and outputs.

Baulds series

The Baulds series are designed as modular hardware building blocks. This modular approach gives the user the ability to customize their own hardware modules together with a unique look at a competitive price.



Fully configurable

The input/outputs are configurable by using the Baulds device manager. Every digital input/output can be configured as either input or output. This ensures the user full control over the module. Communications are over the CAN bus using the CANopen protocol further specified by CiA 401 (Device profile for generic I/O modules). For safety applications the CANopen-Safety protocol is used (CiA 304). This guarantees a generic and safe approach for the module and its communication.

Functional safety

All input and outputs can be used as safe IO's. The input and output combinations feature selfcheck hardware. The analogue inputs are NAMUR (NE43) inputs for extra safety diagnostics. This together with the CANopen safety (CiA 304) bus makes the BIM-2S makes an excellent safe IO module (pre) certified at Performance Level d (PLd) (IEC13849-1:2015)/SIL2 (IEC61508:2010).

Specifications

Applications

- Industrial
- Construction equipment
- Smart farming machinery
- Transportation

Electrical data

Operating voltage	9-32 VDC
Total current max.	13A
Output current max.	2A

Approval/Conformity

- CE
- Safety
- UL94-VD

Functional safety

Performance level (IEC 13849-1)	d
Safety category (IEC 13849-1)	2
SIL (IEC 61508)	2

Electrical connection

Supply and communication IO's and sensor supply	2x DEUTSCH automotive boardlock Male, 6-pin 6x M12 Female, 4-pin, A-coded
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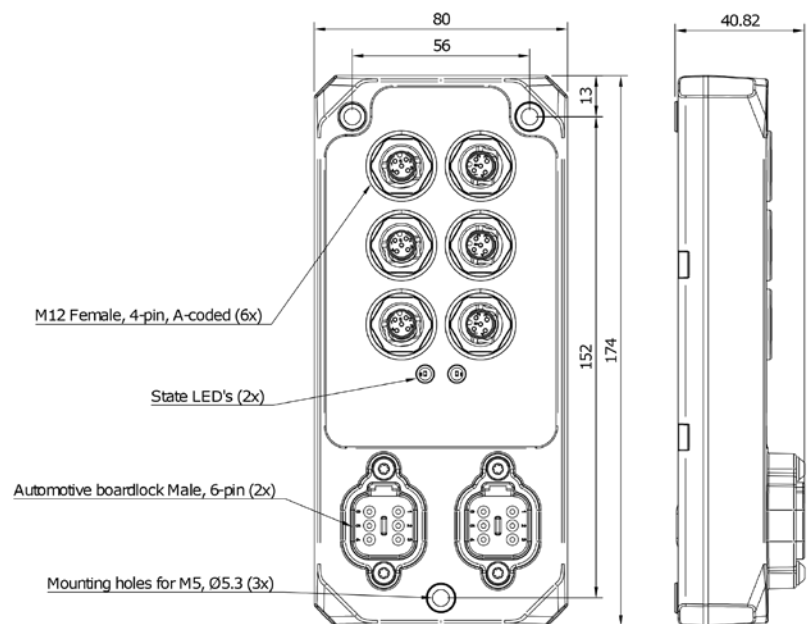
*10 IO's in total (configurable)

Environmental conditions

IP rating	IP67, when threated in
Ambient temperature	-20 - +60°C
Storage temperature	-20 - +70°C
Enclosure material	PC-ABS

Interface

Digital input	10x Safe PNP, Typ 1 and 3
Digital outputs	10x Safe High-side switch (10 digital IO's in total configuration)
Analogue inputs	2x4 - 20 mA (NAMUR)
Interface	CANopen-safety





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