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# PRODUCT PROFILE

## ArmorBlock® Guard I/O™ 1732 DS

### ArmorBlock Guard I/O

ArmorBlock Guard I/O is a remote I/O node for the control and monitoring of safety devices. It communicates on DeviceNet using the CIP Safety protocol and is optimized to work with Guard PLC™, GuardLogix®, and SmartGuard™ controllers. As a proven technology, Guard I/O can detect failures at the I/O and field device level, while enhancing operator protection.

It can be easily mounted on the machine, close to the sensors and actuators, reducing wiring time and startup costs by reducing electrical boxes and simplifying cable installation.

The simple design of ArmorBlock Guard I/O allows module replacement in minutes, reducing the need for special maintenance or training.

Its robust construction enables reliability in harsh environments. ArmorBlock Guard I/O is especially suited for robotic, point-of-operation, guard-monitoring, and all remote control applications.

*To learn more about Rockwell Automation's Industry leading safety product line please visit: [www.ab.com/safety](http://www.ab.com/safety)*



### Benefits:

- **Compact:** save space on your equipment, and simplify retrofit applications
- **I/O point level diagnostics and LEDs:** quickly identify a problem and reduce machine downtime
- **Water and corrosion-resistant with an IP67 rated:** install almost anywhere in many environmentally challenging applications
- **TÜV certified:** For use in safety applications, up to SIL3 and Category 4
- **Versatility:** Can connect to both standard and safety rated sensors
- **Flexibility:** supports connection of single and dual channel safety devices
- **Simplified Installation:** a single M12 cable connection to dual-channel devices on inputs and outputs: using quick disconnects
- **Easy Configuration:** via RSLogix™ 5000 or RSNetWorx™ for DeviceNet
- **Added capability for standard control:** Use test outputs for added diagnostics, panel lamps, standard actuators, etc. and connect standard proximity switches, sensors and pushbuttons to unused safety inputs

# PRODUCT SPECIFICATIONS

Cat. No.	1732DS-IB8	1732DS-IB8X0BV4
Description	24V dc Input Module on DeviceNet Networks	24V dc Input/Output Module on DeviceNet Networks
Current Consumption	85 mA @ 24V dc	85 mA @ 24V dc
Voltage, DeviceNet Power, Min.	11 V dc	11 V dc
Voltage, DeviceNet Power, Max.	25V dc	25V dc
I/O Operating Voltage Range	19.2V...28.8 V dc (24V dc, -20...+20%)	19.2V...28.8 V dc (24V dc, -20...+20%)
I/O Channel Isolation	Isolated	Isolated
<b>Digital Inputs</b>		
Number of Inputs (single-channel)	8 safety	8 safety
Voltage, On-State Input, Min.	11V dc	11V dc
Voltage, Off-State Input, Max.	5V dc	5V dc
Current, On-State Input, Min.	3.3 mA	3.3 mA
Input Delay Time, OFF to ON	16.2 ms max	16.2 ms max
Input Delay Time, ON to OFF	16.2 ms max	16.2 ms max
<b>Digital Outputs</b>		
Number of Outputs	—	4 safety solid-state
Output Type	—	dual channel, current sourcing/current sinking pair
Output Current Rating	—	2 A max per point 8 A total module @ 40 °C (104 °F) 6 A total module @ 60 °C (140 °F)
Output Leakage Current, Max.	—	± 1.0 mA
Output Delay Time, OFF to ON, Max.	—	6.2 ms
Output Delay Time, ON to OFF, Max.	—	6.2 ms
Current per Module, Max.	—	8 A @ 40 °C (104 °F) 6 A @ 60 °C (140 °F)
Short Circuit Protection	—	Yes
Overcurrent Detection	—	Yes
<b>Standard Pulse Test Outputs</b>		
Number of Pulse Test Sources	8	8
Pulse Test Output Current	0.7 A per point	0.7 A per point
Pulse Test Output Leakage Current, Max.	0.1 mA	0.1 mA
Short Circuit Protection	Yes	Yes
Overcurrent Protection	Yes	Yes
<b>General</b>		
Operating Temperature	-20°...+60°C (-4°C...+140°F)	-20°...+60°C (-4°C...+140°F)
Storage Temperature	-20°...+85°C (-4°C...+185°F)	-20°...+85°C (-4°C...+185°F)
Relative Humidity	10...95% non-condensing	10...95% non-condensing
Vibration	0.76 mm @ 10...500 Hz	0.76 mm @ 10...500 Hz
Shock, Operating	30 g	30 g
Enclosure Type Rating	IP67	IP67
Dimensions (HxWxD), Metric	179 x 70 x 68.7 mm <sup>1</sup>	179 x 70 x 68.7 mm <sup>1</sup>
Dimensions (HxWxD), Imperial	7.05 x 2.76 x 2.71 in <sup>1</sup>	7.05 x 2.76 x 2.71 in <sup>1</sup>
Weight, Metric	600 g	600 g
Weight, Imperial	1.2 lb	1.2 lb
Certifications <sup>2</sup>	UL, CE, C-Tick, CSA, UL Class I Div 2 Hazardous, UL NRGF, ODVA Conformance, TÜV certified for functional safety up to SIL 3, Cat.4	

<sup>1</sup> Includes terminal block.

<sup>2</sup> When product is marked. See the Product Certification link at <http://www.ab.com/certification> for Declarations of Conformity, Certificates, and other certification details. All specifications are subject to change. Refer to product installations instructions.

[www.rockwellautomation.com](http://www.rockwellautomation.com)

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