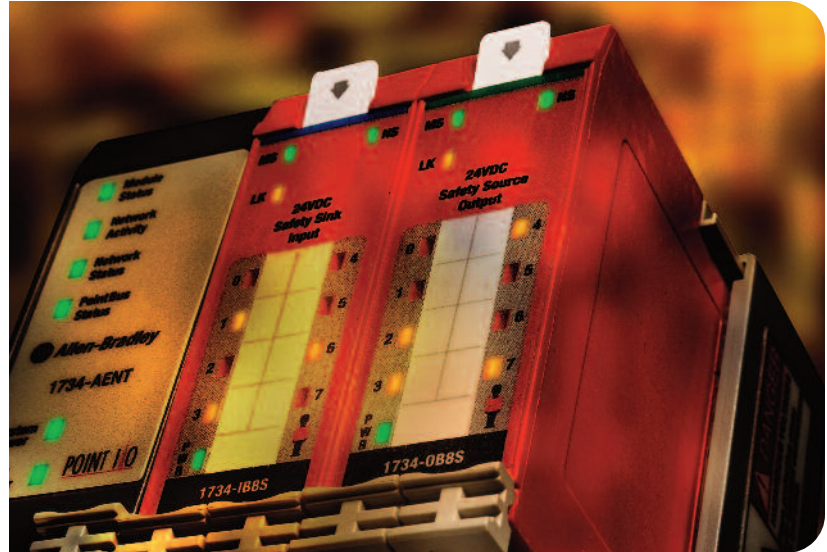# POINT Guard I/O™ Product Profile

Safety and automation control in one compact I/O platform

Benefits

- **Cost optimized:** mix safety inputs and outputs with standard POINT I/O, all with one node
- **Compact solution:** maximum I/O density in minimum panel space
- **Easy retrofit:** add to existing panels using POINT I/O
- **I/O point level diagnostics and LEDs:** quickly identify a problem to help reduce machine downtime
- **TÜV certified:** for use in safety applications up to SIL3, PLe and CAT 4
- **Easier configuration:** via RSLogix™ 5000 with full support of IP addressing
- **Flexibility:** supports connection of single and dual channel safety devices on inputs and outputs
- **Individual test outputs:** can be assigned for each safety input device allowing for optimized cable installations
- **Muting lamp control:** provided on selected test pulse outputs for lamp control and fault monitoring

Simplified control system safety integration

POINT Guard I/O

POINT Guard I/O are safety rated I/O modules designed to fit into the standard POINT I/O system, thus offering automation and safety functionality in a maximum density I/O solution. They are ideal for use in applications requiring safety and automation control. They communicate with CIP Safety protocol over EtherNet/IP for GuardLogix safety controllers and DeviceNet for SmartGuard600 safety controllers.

- **CIP Safety** over EtherNet/IP or DeviceNet
- **Maximum density** I/O solution for premium panel space applications
- **Safety and automation control** in one I/O solution

The application of the CIP Safety protocol allows simultaneous transmission of safety and automation control data and diagnostic information over one CIP network.

POINT I/O and POINT Guard I/O can be controlled by a single GuardLogix controller for both safety and automation control through one node. If separate safety control is required, a GuardLogix controller can be used with POINT Guard I/O for safety control and a ControlLogix controller with POINT I/O for automation control. No changes are required to the POINT I/O system.

This solution is ideal for applications requiring maximum I/O density in minimum panel space. The advanced solid-state design allows for module replacement in minutes and reduces the need for special maintenance or training.

POINT Guard I/O is designed for use with industrial equipment and is especially suited for robotic, point-of-operation, guard-monitoring and distributed control applications.

Product Specifications

Catalog Number	1734-IB8S	1734-OB8S
Description	24V dc Input Module	24V dc Solid-State Output Module
POINT Bus Current Consumption (maximum)	175 mA @ 5V dc	190 mA @ 5V dc
Field Power, Operating Voltage Range	19.2…28.8Vdc, 24dc Nominal	19.2…28.8Vdc, 24dc Nominal
I/O Channel Isolation	Isolated	Isolated
Digital Inputs		
Number of Inputs (single-channel)	8 safety	—
Input Type	Current sinking	—
Voltage, On-State Input, Min.	11 V dc	—
Voltage, Off-State Input, Max.	5V dc	—
Current, On-State Input, Min.	3.3 mA	—
Input Delay Time, OFF to ON	16.2 ms max	—
Input Delay Time, ON to OFF	16.2 ms max	—
Digital Outputs		
Number of Outputs (single channel)	—	8 safety
Output Type	—	current sourcing
Output Current Rating	—	1 A max. per point
Output Leakage Current, Max.	—	0.1 mA
Output Delay Time, OFF to ON, Max.	—	6.2 ms max
Output Delay Time, ON to OFF, Max.	—	6.2 ms max
Short Circuit Protection	—	Yes, Electronic
Overcurrent Detection	—	Yes
Standard Pulse Test Outputs		
Number of Pulse Test Sources	4	none
Pulse Test Output Current	0.7 A per point	N/A
Pulse Test Output Leakage Current, Max.	0.1 mA	N/A
Short Circuit Protection	Yes	N/A
General		
Operating Temperature	-20℃…+55℃	-20℃…+55℃
Storage Temperature	-40℃…+85℃	-40℃…+85℃
Relative Humidity	5…95% non-condensing	5…95% non-condensing
Vibration	5 g @ 10…500 Hz	5 g @ 10…500 Hz
Shock, Operating	30 g	30 g
Enclosure Protection	IP 20	IP 20
Dimensions-without terminal base (HxWxD)	77 x n	77 x 25 x 55 mm
Dimensions-without terminal base (HxWxD)	3.03 17 in.	3.03 x 0.98 x 2.17 in.
Weight, Metric	See user instructions	See user instructions
Weight, Imperial	See user instructions	See user instructions
Compatible POINT I/O Terminal Bases	1734-TB,-TOP,-TOP3	1734-TB,-TOP,-TOP3
Certifications		
CE, C-Tick, CSA, ODVA Conformance, TÜV certified for functional safety up to SIL 3, Cat. 4, PL e UL and UL Class l Div 2 Hazardous - when product is marked		