



AUTOMATION SYSTEMS
GROUP

Fusion™ Controls High-Performance I/O Node

TOOL AUTOMATION



Features

- 8 Isolated Digital Outputs
- 2 High Current Isolated Digital Outputs
- 12 Isolated Digital Inputs, of which any 4 can be configured for high speed position capture
- 2 Analog Outputs
- 6 Analog Inputs
- 24VDC Input Power
- Connect up to 3 nodes in series

Benefits

- Extend I/O Using Up to 60 Nodes
- Optimize Wiring Through Remotely Located Nodes

The Fusion Controls High-Performance I/O Node extends Brooks Automation's powerful Fusion motion networking technology providing fast, distributed I/O, both digital and analog, for motion control applications.

The Fusion Controls Advantage

As the semiconductor market matures and fabrication processes grow more complex, assembling and integrating solutions from multiple vendors is no longer a viable alternative for manufacturers looking to reduce costs and increase tool reliability. In order to meet escalating performance demands and control costs, users are seeking complete, integrated solutions that solve all their automation needs, while providing open, intuitive interfaces for fast, easy customization and optimization. That's why Brooks Automation's Fusion Controls platform is the automation control solution for today's leading OEM tool manufacturers.

Brooks Automation's innovative Fusion Controls platform is the industry's most flexible and complete automation control solution. Fully customizable and remarkably easy to use, Fusion Controls delivers maximum performance and uptime, while accelerating time to market and tool profitability.

Product Description

The Fusion Controls High-Performance I/O Node is a self-contained module featuring both digital and analog inputs and outputs. The node is suitable for being conveniently located remotely at the source of the I/O and connecting to a Fusion Controller via the Fusion Controls Motion Network. The Fusion Controls motion network allows synchronization of I/O and axes of motion within 5µs allowing precision position capture and high performance motion and I/O coordination. For additional information, please reference the Fusion High-Performance I/O Node Manual.



Fusion™ Controls High-Performance I/O Node

Fusion Controls High-Performance I/O Node Specifications

	Interface	Quantity	Comment
OUTPUTS	Digital Outputs	8	<ul style="list-style-type: none"> • 0-24VDC, ≤90mA • High or Low-Side (PNP or NPN) • Optically Isolated
	High Current Digital Outputs	2	<ul style="list-style-type: none"> • 0-24VDC, ≤1A • High-side (PNP) • Optically Isolated
	Analog Outputs	2	<ul style="list-style-type: none"> • 0-24VDC ±5%, ≤1mA • 8 bit Resolution • Short Circuit Protected
	24VDC Outputs	4	<ul style="list-style-type: none"> • 1A Fuse
	5VDC Outputs	3	<ul style="list-style-type: none"> • 1A Fuse
INPUTS	Digital Inputs (Total/Configurable High Speed)	12/4	<ul style="list-style-type: none"> • 0-30VDC, >3V for Logic High • High or Low-Side (PNP or NPN) • Optically Isolated • Any 4 can be configured at any time for high speed position capture (≥5μs)
	Analog Inputs	6	<ul style="list-style-type: none"> • 0-5VDC single ended • 12 bit Resolution • Low Pass Filter <1kHz
NETWORK & POWER	Power Input	2	<ul style="list-style-type: none"> • 24VDC ±10%, <3A (Max 9A if 3 nodes in series) • Dual connections allow connecting up to 3 nodes in series
	Network Interface	3 RJ45 1 Bilingual	<ul style="list-style-type: none"> • Fusion Controls Motion Network
Other Specifications			
Dimensions	193 x 136 x 36 mm (7.6 x 5.35 x 1.4")		
Operating Temperature	5°C to 40°C		

For more information, please contact your local Brooks Automation sales representative or visit www.brooks.com.

