

## Series C Input/Output Modules Reshaping Control Technology



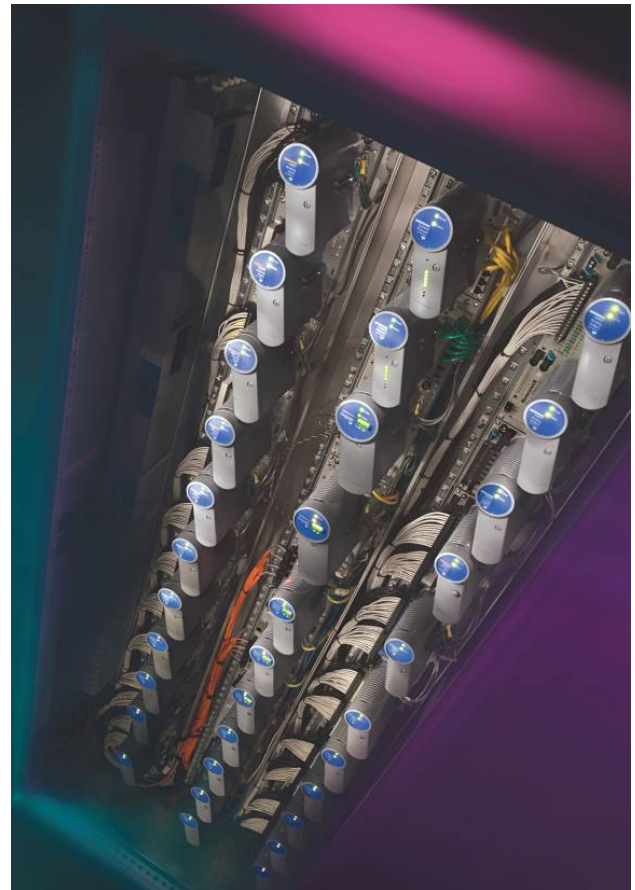
The Honeywell Series C I/O and controller modules leverage Honeywell's leadership in process control technology with an innovative design. Integrated with the Experion® Process Knowledge System (PKS), Series C I/O modules deliver unmatched benefits.

The unique, patent-pending design combines a sleek style and function to provide process I/O with a compact footprint, efficient installation and maintenance, and long product lifecycle. The Series C form factor benefits extend to multiple modules, such as the Series C C300 Controller, the FOUNDATION Fieldbus\* Interface Module, the Control Firewall, HART\* analog modules, and digital modules including digital input sequence of events (DISOE).

Series C customers realize the following benefits:

- Designed vertical, removable, two-tier wiring terminations provide easily accessible wiring to reduce installation and maintenance costs.
- High density modular construction delivers an optimized footprint and reduced total installed costs
- A “zero footprint” power system that supplies optionally redundant, battery backed-up power to the modules without consuming valuable module mounting space.
- Slanted module form factor creates a uniform heat distribution to extend module life by reducing hot spots

Full redundancy with no shared backplane provides high availability and long lifecycle.



## Efficient Wiring Installation and Maintenance

Traditionally, I/O modules include horizontal wiring terminal blocks with hard to reach layered terminals. Trying to avoid this difficult wiring often means adding additional remote termination panels, as well as giving up the potential



footprint and compact benefits gained from those modules. When using the I/O module terminal blocks themselves, wiring a cabinet with horizontally-oriented terminal blocks requires multiple 90-degree turns and inefficient wire bundles.

Series C modules solve this dilemma with their designed-

vertical innovation. The Series C cabinet architecture eliminates forced 90-degree turns as the wire enters the cabinet vertically and can run directly to terminal strips without multiple bends and turns. Series C modules also feature an integrated and removable wiring termination area that is easily accessible and provides a clear wiring base for local terminations. In many cases, the number of terminations required can be reduced over horizontal wiring by efficiently wiring directly to the Series C I/O termination assemblies.

Cleaner and less complex wire routing and better access to terminal blocks increases maintainability and reduces costly mistakes. Using Series C modules can save three minutes per point on a typical installation over traditional four-tier horizontal wiring, which adds up to \$10,000 on a 5,000 point project.

## Reduce Total Installed Cost with Maximum I/O in Minimum Footprint

Series C I/O modules are integrated with field wire terminations to provide a more reliable system while also reducing the overall footprint. In addition, several modules offer high-density capacity, such as the Series C Fieldbus Interface Module, minimizing the number of modules required.

In fact, other I/O cabinet offerings deliver a typical footprint 5-75% larger than Honeywell's Series C I/O. Reducing the footprint reduces cost throughout the entire build cycle—from the panel shop to the final installation, including shipping costs.

## Optimize Lifecycle and Availability

Several Series C features combine to reduce lifecycle costs and ensure system availability. Building upon Honeywell's long tradition in delivering robust I/O, Series C offers the following high-availability features:

- The innovative slanted angle directs heat flow evenly through the cabinet, keeping components cooler to improve product lifecycle.
- With no common backplane, opportunities for failure are eliminated; and more importantly, the scope of loss of multiple components is significantly reduced.
- Field power is integrated through the I/O modules. This eliminates the need for external loop wiring, as well as additional power systems. This also maintains field power in the event of a main power upset though the optional UPS.
- Fuses are not required due to enhanced Field Wiring Protection
- Modules are available in redundant configurations. With a redundant base assembly, a second module can be added at any time to create a redundant pair.
- Honeywell's patented Fault Tolerant Ethernet provides the backbone between the modules, delivering a robust and cost-effective infrastructure.



### Investment Protection for Existing I/O Families

Honeywell continues the long tradition of protecting customer investments by allowing existing I/O families to integrate directly with the C300 controller. A typical project can spend as much as 30% of the total project cost in I/O and related infrastructure, such as marshalling terminations and surge protection. The C300 provides investment protection by allowing the existing I/O to be directly interfaced to the C300.

These existing I/O families can even co-exist with new Series C I/O on the same C300 controller. Each C300 supports the same I/O that is supported with the C200 controller, including:

- Process Manager I/O
- Series A Chassis I/O

In subsequent releases, the C300 will extend native support to:

- Series A Rail I/O
- Series H Rail I/O

With the innovative Series C vertical design, Honeywell is reshaping process control technology to deliver a lower, total-installed cost and optimized product lifecycle.

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### For More Information

Learn more about Honeywell's Series C modules and their benefits, visit our website [www.honeywell.com/ps](http://www.honeywell.com/ps) or contact your Honeywell account manager.

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