

Festo Simplifies Decentralized I/O Design with a Configurable Digital I/O Module

Configurable I/O reduces module complexity, while a new CC-Link bus node adds Mitsubishi Electric network support.

MASON, Ohio, August 18, 2026 — As automated machines become more capable, increasing amounts of decentralized I/O are needed. Conventional approaches often rely on multiple dedicated input and output modules, increasing hardware, commissioning, and additional components that machine builders and system integrators must engineer, stock, and support.

Festo addresses this challenge with a new configurable digital I/O module for the CPX-AP-I decentralized I/O platform. Instead of forcing machine builders to work around fixed I/O configurations, this new module adapts to the application, enabling more efficient use of decentralized I/O across a machine.

The new [CPX-AP-I configurable digital I/O module](#) provides 16 channels that can each be configured as a digital input or digital output to match application requirements. Users can configure the module channel by channel, divide it into eight inputs and eight outputs, or dedicate all 16 channels to output functions. Selected output channels provide up to 500 mA for high-current devices.

The module ships with a default 16-input configuration for immediate installation, while output functions are enabled through software parameterization. Individual LED indicators on each channel simplify commissioning and troubleshooting by providing clear operating and diagnostic status. The M12 version is available now.

The configurable digital I/O module gives machine builders greater freedom to design around the needs of the application instead of the limitations of fixed I/O modules. A single module can support a wider range of machine configurations, reducing the number of module variants that must be specified, stocked, and maintained over the life of a machine.

The new module is part of Festo's CPX-AP-I decentralized I/O platform, a high-performance system that distributes I/O, valve terminals, and IO-Link devices throughout a machine. Supporting up to 80 modules over distances of up to 164 ft (50 m) between modules, the platform reduces wiring, simplifies modular machine architectures, and allows machine builders to expand or reconfigure systems without redesigning the entire control architecture.

Expanding Connectivity with CC-Link IE Field Basic

Festo has also introduced a new [CPX-AP-I bus node](#) supporting CC-Link IE Field Basic, expanding the platform's connectivity for Mitsubishi Electric Automation's environments. Widely used throughout Asia, the industrial Ethernet protocol enables machine builders to integrate CPX-AP-I decentralized I/O into Mitsubishi PLC architecture without additional gateways or custom engineering.

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V.i.S.d.P.:
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The new bus node allows machine builders to retain the same CPX-AP-I decentralized I/O architecture while changing only the network interface for Mitsubishi Electric systems. The result is less engineering, faster machine adaptation for regional markets, and a common automation platform that supports multiple industrial Ethernet protocols, including EtherNet/IP, PROFINET, EtherCAT, Modbus TCP, and now CC-Link IE Field Basic.

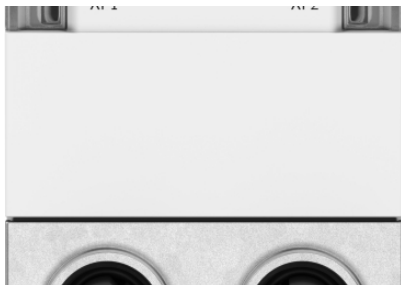
For more information on the [CPX-AP-I-16DIO M12](#) module and the [CC-Link IE Field Basic module](#), visit the Festo website. And speak with a Festo sales representative or distributor about the automation industry's widest range of integrated solutions in pneumatic and electric motion and I/O.

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CPX-AP-I-16DIO M12

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