



New EtherCAT slave motion controller and I/O coupler extends machine functionality

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Control Technology Corporation (CTC) has released an EtherCAT slave automation controller with integrated I/O that can be used with various master controllers. The new CTC EtherCAT Coupler and Automation Controller enables flexible and scalable machine extension and integration for servo and stepper axes as well as I/O connected devices. CTC master automation controllers and slave devices are available from INMOCO, the brand's European distributor.

CTC's new slave EtherCAT automation controller can be used with an EtherCAT master controller to extend motion axes. The device also presents the option of increasing control functionality through I/O option cards to suit machine architecture requirements. The new device integrates with CTC's EtherCAT master controller and is also tested to operate with third-party EtherCAT controllers from manufacturers including Beckhoff.

CTC's new slave EtherCAT automation controller with built-in I/O also provides a hardware interface to enable easy integration with CTC's PC-based Incentive motion control programming suite. IncentiveAPI provides a high-level control API, while IncentivePLC is a multitasking programable controller that runs motion commands. Both platforms can



execute control via CTC's new slave EtherCAT automation controller that integrates servo axes and extends I/O connectivity.

The slave controller includes a 200 MHz 32-bit ARM processor and executes high speed EtherCAT control with 100 base T performance, and the device can coordinate up to 16 motion axes. For integration flexibility, the controller features two Ethernet ports, four serial ports, and one USB port. Designers can also choose from a variety of high-density digital and analogue I/O modules, including a two, four, or eight-slot rack design that accommodates up to 256 I/O points. The controller can also support a local HMI, as well as protocols such as Modbus.

Meanwhile, CTC's M3-41A EtherCAT Master module inserts into any 5300 Series controller to provide EtherCAT master functionality. The device controls up to 16 axes and 2000 I/O points per network. With a wide variety of motion command functionality, the module executes 1 mS updates across all axes. Alternatively, the PC-based IncentivePLC, that integrates with the IncentiveECAT PC-based motion controller, coordinates up to 64 motion axes with multitasking for up to 96 simultaneous tasks.

CTC controllers are easily programmed using CTC's Quickbuilder state language programming. QuickBuilder is a high-level language with automation-specific commands that accelerate design and commissioning. The language enables designers to build programming architecture by connecting control function blocks in a visually obvious approach that enables fast and simple motion programming. CTC's PC-based Incentive and IncentiveAPI also provides a high-level control API



where code can be written in C#, C++ and VB.Net on the PC to access and control all EtherCAT devices.

Inmoco supports machines with CTC motion control supplied from the US into the UK and Europe and can also supply CTC motion control technology to European OEMs.



Image Captions:



Image 1: ECAT EtherCAT Coupler and Automation Controller with 2 slots.



Image 2: ECAT EtherCAT Coupler and Automation Controller with 4 slots.

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About INMOCO

Established in 1987, INMOCO now offers an extensive range of motion control equipment including: compact servo amplifiers, position controllers, stepper motors, PLC controllers, linear motors, sensors, electric actuators and gearheads. INMOCO's product portfolio is supported by extensive applications and technical expertise, in addition to customer-specified electro-mechanical development and sub-assembly services; including calibrating and testing in a class 10,000 clean room facility.

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