

Product update

New Generation Ethernet/IP

> August 2010



We are delighted to present new generation Ethernet/IP modules for our Modicon M340, Premium and Quantum Programmable Automation Controller (PAC) platforms.

The ODVA – the international organisation that promotes the development of open communications technologies, of which we are a principal member, has recently extended Common Industrial Protocol (CIP) network specifications to include compatibility with Modbus/TCP devices.

We are now deploying Ethernet/IP as the foundation of our network strategy, and the recent developments from the ODVA have allowed us to bring together the two leading industrial Ethernet protocols – Modbus/TCP and Ethernet/IP into the same physical communications modules.



> This is another pioneering first on the market launch, and it brings significant benefits:

- > Increased interoperability between the largest installed bases of industrial Ethernet networks and new generation automation products from an ever-increasing number of vendors
- > Compatibility with existing Modbus/TCP, as well as access to the complete suite of advanced services provided by CIP protocol.
- > Reduced cost, time and risk involved in deploying and maintaining multiple network architectures
- > High levels of interoperability and seamless automation of factory floor equipment thanks to use of standard, unmodified Ethernet

	Reference	Description
	140 NOC 771 01	Quantum Ethernet/IP module
	TSX ETC 101	Premium Ethernet/IP module
	BMX NOC 04 01	M340 Ethernet/IP module

New Generation Ethernet/IP

> Protocol convergence

- > Configure, control, monitor, and diagnose Modbus TCP and EtherNet/IP devices simultaneously on the same Ethernet network
- > Leverage your investment over a longer period: use existing equipment regardless of network protocol
- > Optimize performance: choose the best devices for the operation, leveraging Modbus TCP or EtherNet/IP
- > Achieve real transparency in the control network
- > Gain efficiency by eliminating PLCs dedicated to a single protocol

> Expanded communication Capacity

- > Perform more transactions per second than legacy products or the competition
- > Expand network capacity with the addition of a single EtherNet/IP module for all needs
- > Conserve energy by getting the most of your existing PLC before expanding with another rack

> Standard Ethernet implementation

- > Entirely based on the convergence of standard protocols and unmodified Ethernet
- > Simplify connections to 3rd party networks, minimizing the need for adapters and gateways
- > Accelerate configuration of 3rd party devices through the use of standard EDS files for EtherNet/IP communications
- > Continue to evolve with the rest of the industry

> Ring architectures for I/O

- > Use the M340 NOC to construct redundant I/O topologies, such as Daisy Chain Loops or Rings, to ensure consistent delivery of I/O data
- > Reduce solution cost by minimizing the cable requirements and the number of switches in the network
- > Self-healing I/O rings help minimize downtime, allowing the network to operate continuously
- > Diminish the risk of broadcast storms damaging end devices, thanks to RSTP

> DTM-based configuration

- > Configure communications and diagnose any device, including those from 3rd parties, using Unity Pro, with its in-built FDT-DTM container, regardless of protocol
- > Simplify your training requirements by using a single configuration software (Unity Pro)
- > Obtain a comprehensive view of the network and the status of all devices at a single glance
- > Diagnose communication problems faster and establish the status of all devices with a single click

> Automated fieldbus discovery

- > Scan the network, identify all devices available, and select the devices to add to the application
- > Save time. Detect dozens of devices in seconds; create large configurations in just a few minutes
- > Avoid errors caused by mistyping of device information

For further information please
contact us on 0870 608 8 608 or
visit www.schneider-electric.co.uk