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## Modicon™ PLC Products

### Modicon™ TSX Micro™ PLC



Compact and cost-efficient, this mid-range PLC boasts the power and flexibility OEMs find most desirable. Optional integrated safety relays, half-size I/O and web-enabled modules provide seamless connection to supervisory maintenance

systems plus minimize real estate. PCMCIA memory cards preserve your investment when expanding. Communication options include Ethernet and ASI for global access using Open standards. More details are available at [www.schneider-electric.com](http://www.schneider-electric.com).

### Modicon M340™ PAC



Our latest midrange PAC is the most integrated ever! Highly requested by industrial OEMs and end users, the all-power-inside concept boasts high-performance processing and small size to create a system that provides flexibility beyond any before. With up to 3 built-in CPU

communication ports, large memory options, 64 channel high-density modules, and embedded web-servers, the Modicon M340 is a powerful solution for industrial OEMs and end users demanding more productivity in their PACs. The Modicon M340 PAC supports advanced communications such as enhanced EtherNet/IP which support both EtherNet/IP, Modbus TCP/IP and daisy chain loop communications on the same 4-port, rack mounted switch module. It will also support DNP3.0 in serial or Ethernet in a rack-mounted RTU module. The Modicon M340 PAC is programmed with Unity Pro software, which allows users to dramatically reduce setup time and effort with features like drag 'n drop CANopen bus setup and standard IEC 61131-3 language selection. Designers gain fast, easy and efficient startups. More details are found on our website or in the latest Modicon M340 catalogs and brochures. More details are available at [www.schneider-electric.com](http://www.schneider-electric.com), or in catalog **DIA6ED2081007EN-US**.

### Modicon Premium™ PLC



Ideally suited for discrete manufacturing, complex OEM applications as well as municipality and infrastructure applications, this cost-effective PLC line features integrated functions such as weighing, interpolated motion control, and process loops. Using the built-in Ethernet port, user-

customized web page capabilities, and a range of popular Open-standard fieldbus connections the Modicon Premium enables seamless communication with enterprise systems providing low-cost remote maintenance diagnostics. More details are available at [www.schneider-electric.com](http://www.schneider-electric.com), or in catalog **MKTED208054EN-US**.

### Modicon Quantum™ PLC



The Modicon Quantum PLC is our high-end, full function PLC designed for high I/O count industrial applications that require high performance such as Pharmaceutical, Petrochemical, Food & Beverage, Automotive, and others. Quantum also offers true bumpless hot standby. Quantum processors

can be programmed with Unity Pro. It will also support legacy 984 ladder logic programs in the LL984 Unity Pro editor by simply importing the legacy application program. Concept™ application software and ProWORX™ 32 application software are also supported on the Quantum platform. The Unity Quantum's onboard memory can exceed 3 Mbytes. The Unity Quantums can have more than 7 Mbytes of extended memory on a PCMCIA card for data and application storage combined. They can have over 8 Mbytes of just data storage. The Quantum PLC also offers Safety PLC versions certified for use in up to SIL3 applications. This includes both standard and hot standby capability as well as redundant I/O. It programs with Unity Pro XLS. The SIL3 offer stresses both high reliability as well as high availability. More details are available at [www.schneider-electric.com](http://www.schneider-electric.com), or in catalog **MKTED208011EN-US**.

Information about the SIL3 Quantum is available in brochure **8000BR0808R03/10**.

## Unity™ Pro Application Software



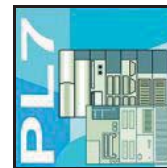
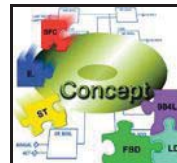
Unity Pro is a new generation software platform for application development. Unity Pro is compatible with all Industrial End User midrange and highend controllers including Modicon M340, Premium and Quantum PLCs. Unity provides a collaborative automation environment that enables individuals and teams to work together more effectively, reducing the cost of developing and managing automation solutions. Unity Pro XLS software is used to program the SIL3 Quantum as well as all Unity-based, standard Quantums, Unity-based Premiums and M340s. Since one software package can program all the platforms, it greatly simplifies development and support issues. It integrates commercial IT technologies like Ethernet, VBA, XML and hyperlinks within the traditional control framework to enable customers to reduce the cost of automating both discrete and batch control applications. More details are available at [www.schneider-electric.com](http://www.schneider-electric.com), or in brochure **8000BR0935R02/10**.

## Unity Application Generator



Unity Application Generator is an advanced design and generation software tool that integrates multiple PLCs and HMI/SCADA systems to provide an automation solution rivaling a Distributed Control System (DCS). UAG supports structured project design by providing a software tool to bridge from the process engineer to the control/automation designer (from the P&ID to the automation system). UAG will capture and re-use the Customer's best practices within application-specific libraries that reduce the dependency on experts and enable standardization and increases software robustness. Single database entry avoids duplicate effort and resulting errors. Automatic Application Generation including the automatic configuration of networks in multi device systems increases efficiency, improves software quality, speeds commissioning while simultaneously reducing project risk. Integrated change tracking and automatic documentation generation reduces engineering effort and enables system validation. UAG integrates Unity PLCs (M340/Premium/Quantum), Vijeo Citect, Connectors for leading HMI/SCADA systems, Modbus TCP/IP communication and OFS/OPC. Additional information can be found at [www.schneider-electric.com](http://www.schneider-electric.com).

## Concept™ and PL7™ Application Software



Concept and PL7 comply with the IEC 61131 standard for programming software. Concept and PL7 can be programmed in four IEC languages including two text-based editors (Structured Text and Instruction List), and two graphic-based editors (Sequential Function Chart and Ladder Diagram). In addition, Concept can be programmed

using the IEC compliant graphic editor for Derived Function Blocks. The Concept and PL7 software both promote productivity by using structured programming, which increases reusability while reducing maintenance costs. Concept can be used to program the Quantum, and Momentum PLCs while PL7 can be used to program the Micro and Premium. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).

## ProWORX™ 32 Application Software



ProWORX 32 is the simple programming solution to program your Modicon PLCs using 984 ladder logic programming. Compatible with 584, 984, Modicon Micro, Momentum, Compact, and Quantum. Schneider Electric Automation Services maintains the tools necessary to upgrade your ProWORX 32 application to a Unity Pro application with ladder logic that is designed to mirror the 984LL application. More information can be found at [www.schneider-electric.com](http://www.schneider-electric.com).

## Magelis™ Small Panels HMI Products

The Magelis STO/STU, XBT N, XBT R, and XBT RT Small Panels have been specifically designed to satisfy the requirement for panels that are compact and easy to use. These terminals are easy to configure and work seamlessly with other Schneider Electric equipment to provide a complete automation solution, dedicated to simple or compact machines.

### Magelis STO/STU

The new Magelis STO and STU panels enhance the Magelis small panels range by offering more flexibility, more communication capability, and a quick and easy revolutionary mounting system. Powered by Vijeo Designer software, these panels bring a cost-effective solution to all machine builders. The new Magelis STO & STU terminals adapt to your needs by integrating the latest technological innovations to enhance machine productivity. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).



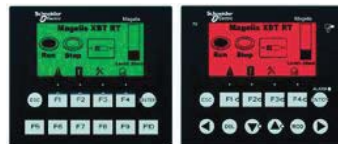
### Magelis XBT N/R

The Magelis XBT N and R matrix screen text display units accommodate up to four lines of large font (20 mm high) text for easy viewing. Rated for IEC 60529, NEMA 4X outdoor use, Class I Div II and UL508, the sturdy Magelis XBT N and R displays feature an ergonomically designed keyboard with up to 20 keys and ports to handle either point-to-point or multipoint communications. A truly global solution, the XBT N and R displays provide low-cost connectivity to all Schneider Electric PLCs using Modbus™ and Uni-Telway™ protocols, support Latin, Cyrillic, Katakana, Greek and Chinese fonts, and six languages. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).



### Magelis XBT RT

The Magelis XBT RT semi-graphic touch screens accommodate up to ten lines of 33 characters of text. Rated for NEMA 4X, Class I Div II and UL508, the sturdy Magelis XBT RT displays semi-graphic objects, bar graphs, curves, buttons, and bitmaps and has ports to handle either point-to-point or multipoint communications. With the ability to choose between touch screen and keypad combination or keypad only operation, the XBT RT, is adaptable. Like the other Magelis small panels, the XBT RT displays provide low-cost connectivity to all Schneider Electric PLCs using Modbus and Uni-Telway protocols and several major third party protocols and supports multiple languages, including Japanese, Cyrillic, Greek and Chinese. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).



## Magelis Advanced Panels HMI Products

The Magelis XBT GT, GK, GH and GTW graphic terminals offer numerous connectivity options from Ethernet to USB. With their exceptional image quality and choice of touch screen and/or keypad interface, they are flexible enough for a large range of applications. When combined with Vijeo Designer configuration software, application designs are unlimited.

### Magelis XBT GT

Available in six sizes (3.8, 5.7, 7.4, 10.4, 12.1 and 15 inches) and 4 function levels, the Magelis XBT GT graphical touch screen terminals are designed to fit all your HMI application needs. Some offer: multimedia capability with a large processing capacity; openness with unequalled connectivity via numerous communication ports and multilink communication for simultaneous equipment control; ease-of-use with simple installation and simple configuration with Vijeo Designer software. The entire product range is RoHS compliant. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).



### Magelis XBT GK

With three models to choose from and two sizes screen sizes, 5.7 and 10.4 inches, the Magelis XBT GK offers a lot of flexibility. The XBT GK uses the same technology of the popular XBT GT but adds a keypad and industrial mouse pointer for extra control and data input that can be configured to operate simultaneously with or without the touchscreen. In a dusty or dirty environment, the keypad enables the use of the terminal, even while wearing gloves. There is an extra added safety feature where two keys can be simultaneously pressed to ensure command order security and the keys can be locked during delicate phases of an operation. Vijeo Designer, the single software package for the entire Magelis Advanced Panel range, ties the solution together. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).



### Magelis XBT GH

Powered by Vijeo Designer software and based on the same technology as XBT GT, the XBT GH hand-held panel combines intuitive operation, quality, durability, mobility and safety with rugged corded mobile design and integrated safety features. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).



### Magelis XBT GTW

Available in two color touch screens sizes, 8.4 and 15 inches, the Magelis XBT GTW terminals offer a Windows environment open to the Web (local and remote diagnostic and maintenance functions) and multimedia applications (streaming video on IP, Webcam management, sound and an integrated video output). With this open platform, the XBT GTW allows you to enhance your HMI applications with Vijeo Designer, while providing total access to Microsoft Office software (Excel, Word, PowerPoint, etc.) and data editing with Office Viewer or Acrobat Reader, two pre-installed applications.



The front panel USB port provides connectivity for peripherals. Numerous communication interfaces such as dual-Ethernet, multiple USB ports and slots provided for PCMCIA (15") and Compact Flash slots are available. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).



## Magelis™ HMI Products

### Magelis Industrial PCs

The Magelis Industrial PC (iPC) range offers “All-In-One” or “BOX + Display” industrial PC for autonomous or distributed applications. The Magelis iPC provides the openness and ergonomics of a Windows environment in a rugged PC that is ready for tough industrial environments. With the Magelis iPC range, you will be sure to find the PC that corresponds exactly to your specifications.

#### “All-In-One” Solutions:

##### • Magelis Smart+ iPC



The new Magelis Smart+ iPC is the first industrial PC with Windows XP Pro operating system that requires no maintenance and contains no rotating parts (no hard disk or fan). The Smart+ iPC also offers all of the openness associated with Windows XP Pro. The IP65 touch screen shares the same 15" dimensions as the rest of the Magelis range. With its Intel® Celeron® M 1 GHz

processor, 1 GB of RAM, and two Ethernet ports, Magelis Smart+ iPC offers great performance, and features a solid state drive (SSD) with Windows XP Pro operating system. The industrially rugged Smart+ iPC has been certified to the most demanding standards, including UL 508 for automation equipment, UL and ATEX for hazardous locations, and marine. Magelis Smart+ iPC supports Vijeo™ Designer™ HMI applications (demonstration version can be expanded to unlimited version) and is the first maintenance-free Magelis iPC to fully support the Vijeo Citect SCADA supervisor.

##### • Magelis Smart iPC



An extension of dedicated terminals and the industrial PC, Magelis Smart is open to the Web. It meets the demands of predefined operator dialog, display and remote diagnostics and is available in 8.4, 12, or 15 inches. Practical and reliable, the Smart has simplified connections, including: 2 Ethernet ports, one with gigabit support, 4 or 5 USB ports, 2 serial ports and a

PCMCIA slot. Its also more resistant to noise and vibration with data storage on static disk (compact Flash) and no fan. The WEB Edition is ready to use as a web client or connected to the FactoryCast Web servers for remote diagnostics via the integrated Web browser. The HMI Edition (with Vijeo Designer runtime) transforms the iPC into an operator terminal.

##### • Magelis Compact iPC



Available in 8.4, 12, or 15", the Magelis Compact iPC provides data storage adapted to industrial needs, Industrial HDD disk or 8 or 16 GB Flash disk (15") only. This panel PC has several extension options, including: 1 PCI slot, dual-Ethernet ports, one with gigabit support, 4 or 5 USB ports, 2 serial ports and a PCMCIA slot.

Vijeo Designer HMI software transforms the iPC into an operator terminal with the advantages of Windows® openness (HMI Edition).

More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).

#### “BOX + Display” Solutions:

From the simple preconfigured Magelis Smart BOX or the Compact PC BOX to the Flex PC BOX with its advanced features, these BOX + Display solutions have in common a high level of design guaranteeing the best reliability possible.

##### • Magelis Smart BOX

The Magelis Smart BOX is preconfigured with MS Windows® and offers the same features as the “All-In-One” version.

##### • Magelis Compact PC BOX

The Magelis Compact PC BOX offers 1 PCI slot and the same features as the Compact iPC

##### • Magelis Flex PC BOX

The Magelis Flex PC BOX features:

- 2 or 4 PCI slots
- Industrial HDD 24/7 and/or 8 or 16 GB disk
- Intel® Celeron® M 440 with 1.86 GHz or Pentium Core Duo with 2 GHz 100-240 Vac or 24 Vdc power supply

#### PC BOX COMPONENTS



To complete the configuration:

- To convert the Flex PC BOX into an “All-In-One” PC, add a 15" or 19" Front Panel in touch version or 12 or 15" Front Panel in touch/keyboard version
- To connect a remote screen to the PC BOX (Smart, Compact, or Flex), add a 15 or 19" iDisplay in touch version or 15" iDisplay in touch /keyboard version.

More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).

#### Vijeo™ Designer



Vijeo Designer configuration software can be used to create HMI applications designed for controlling automation systems for the Magelis HMISTO/STU/GTW/P/XBTGT/XBTGK/XBTGTW/iPC. It's the ideal design tool for the simplest control application right up to the most complex HMI installations. It offers advanced script functions, recipe management, data management, remote access via PC web browser, e-mail and multi-protocol connectivity. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).

## SCADA Products

### Vijeo Citect



The flexibility of Vijeo Citect supervisory control and data acquisition (SCADA) software enables users to achieve the solution that best suits their supervision requirements for installations. Vijeo Citect offers all the functions of a modern supervisor. Its distributed client-server architecture is applicable to a multitude of applications in the most varied domains:

- Energy and infrastructures: airports, roads and tunnels, water wastewater, oil and gas, etc.
- Industries: food and beverage, mining, metals, minerals, system integrator, etc.

This development tool enables the development of any supervision application, from small stand-alone systems to large distributed redundant systems. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).

### Vijeo Historian



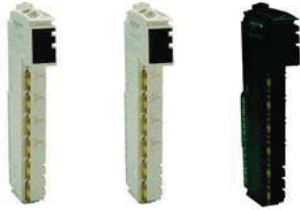
Vijeo Historian, a data logging and reporting software, collects, compares, and records the entire flow of data on a common platform. By establishing the communication between the supervisory systems (SCADA) and database systems, such as Oracle and SQL, Vijeo Historian enables collection and management of the production data and its availability for a vast range of client processing applications. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).

**Advantys™ OTB**

The open and modular new Advantys OTB distributed I/O system offers an ideal solution for IP20 distributed input/output requirements. Users can create I/O islands managed by a master controller, via a fieldbus or communication network. It includes three communication bases for the various types of fieldbus: CANopen™, Ethernet TCP/IP, or Modbus™ RS 485 serial. Discrete or analog I/O are available. More information is available in catalog **DIA3ED2040801EN-US**.



**Modicon™ TM5 Expansion Module**



The Modicon TM5 digital I/O module offer consists of input, mixed I/O and output electronic modules (sensor and preactuator 24 V  $\bar{\text{---}}$  power supply). They complement the embedded I/O in the various M258 controllers and LMC058 motion controllers. They are used to adapt to the application requirements as closely as possible to reduce the installation and wiring costs, and

they can be used with the CANopen communications head and with multiple controllers. These modules offer the following advantages: a removable terminal, spring terminals which can be used for quick, tool-free connection of the sensors and preactuators (and can help eliminate the need for periodic retightening), and hot swapping. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com), or in catalog **MKTED211041EN**.

**Modicon STB**



The Modicon STB is a highly modular distributed I/O platform, integrated wiring solution, and power management system that delivers effective and targeted control. With an open network adaptable to most major field buses, a flexible "island" I/O structure, and simple

configuration via the STBSUP1000 software, Modicon STB is the right choice. The Modicon STB distributed I/O can also be configured directly from Unity™ Pro application software. More information is available in catalog **MKTED208053EN-US**.

**Advantys Telefast™ ABE7 Sub-bases, IP20**



The Advantys Telefast ABE7 pre-wired system enables connection and adaptation of control signals of industrial PLC cards that are fitted with HE10 connectors. It rationalizes cabling by replacing PLC terminals and traditional terminal

blocks—thus improving simplicity and economy. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).

**Advantys Telefast ABE9 Passive splitter boxes, IP67**

Advantys Telefast ABE9 splitter boxes eliminate long and difficult cable runs by avoiding the use of intermediate junction boxes. Due to their modularity and size, they are perfect for the requirements of your varying applications. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com).



**Modicon TM7 I/O Blocks, IP67**



Compact and flexible, the TM7 IP67 I/O Blocks allow connection of sensors and actuators at the heart of processes or machines in severe environments. The wide range of modules provides solutions to match your exact needs. It includes connectivity to CANopen. More information is available at [www.schneider-electric.com](http://www.schneider-electric.com), or in catalog **MKTED211041EN**.

**Modicon Momentum™ Distributed I/O and PLC**



The small footprint and open architecture of the Momentum PLC product line make it extremely versatile for a variety of automation applications. The Momentum PLC is ideal for PC-based control, distributed control, distributed I/O, and traditional, standalone PLC control. Momentum PLC options and accessories include: I/O bases, processor adapters, option adapters and communication adapters that are interchangeable and snap

together to deliver optimal flexibility throughout the control system lifecycle. Using Ethernet as its communications backbone, the Modicon Momentum M1E Processor delivers all the performance benefits of real-time control. The open architecture of the M1E processor makes it a universal controller for distributed I/O, compatible with many of the major fieldbus and control network environments.

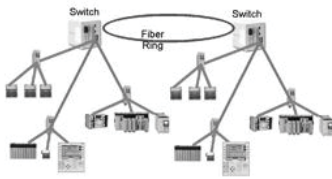
An integral Ethernet port in the M1E allows users to perform a wide range of functions over Ethernet, including data acquisition, peer-to-peer communications, and I/O scanning. Five embedded web pages enable the use of a standard web browser to read status and diagnostic information from the processor.

The most recent addition to the Momentum product offer is the Momentum M1E ConneXium switch. This model combines the power and functionality of the M1E processor with the communication versatility of four Modbus Ethernet TCP/IP ports.

The award winning M1E not only seamlessly connects I/O and other control devices via open standards; it delivers the performance of a full function, real-time controller for stand-alone and distributed system configurations in one money-saving unit. Additional information can be found at [www.schneider-electric.com](http://www.schneider-electric.com) or in catalog **MKTED205061EN**.

## ConneXium™ Products

### ConneXium™ Ethernet Products



The ConneXium line of networking products offers a complete range of Ethernet switches (managed and unmanaged), hubs, transceivers, gateways, cabling, and diagnostic monitoring software for demanding industrial environments. With fiber and redundant capabilities, along with

advanced filtering and security features, ConneXium products improve the performance and security of the network. More details can be found at [www.schneider-electric.com](http://www.schneider-electric.com).

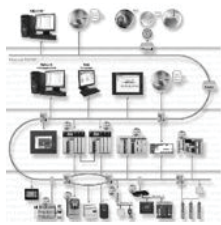
### ConneXview™ Industrial Ethernet Diagnostic Software

ConneXview Industrial Ethernet diagnostic software combines the power of IT-based network management programs with Schneider Electric's Transparent Ready Ethernet expertise to provide a tool specifically designed for the automation environment. ConneXview offers automatic device discovery plus Ethernet (SNMP) and control-network device (Modbus/TCP) mapping. In addition, the software has an easy-to-use graphical interface including convenient task panels for device status, settings and alarms, and topological visual graphics. Other benefits include:

- Increased overall productivity with easy-to-use diagnostics
- Expanded functionality offered with the Device Type Editor, including adding third-party devices to the library and adding unique device names for increased recognition
- An intuitive and ergonomic design that minimizes end-user training and decreases maintenance costs

## Transparent Ready™ Products

### Transparent Ready™ Solutions

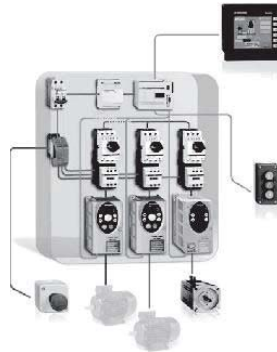


Transparent Ready products cover solutions in Industrial automation to electrical Distribution, and are based on universal Ethernet TCP/IP and Web technologies. They provide seamless communication between plant floor devices, like PLCs, drives, and MCCs, with corporate business systems. Use of the open Modbus TCP/IP and EtherNet/IP protocols that are the leading industrial Ethernet protocols, broadens the scope of dedicated machine diagnostics to remote

management. Choosing Transparent Ready means opting for flexible, open automation architectures. More details can be found at [www.schneider-electric.com](http://www.schneider-electric.com).

## Network Products

### CANopen Products



CANopen is an open network that is supported by over 400 companies world wide and promoted by CAN in Automation. CANopen is standardized in the EN50325-4 and in ISO15745-2 for its device description.

The main reason for using a network is the performance and the flexibility to adapt the network exactly to the requirements of the application.

CANopen provides a unique feature for the adaptation of the data transmission. Based on the producer/consumer model, CANopen allows for a data transmission broadcast, peer-to-peer, change-of-state and cyclic

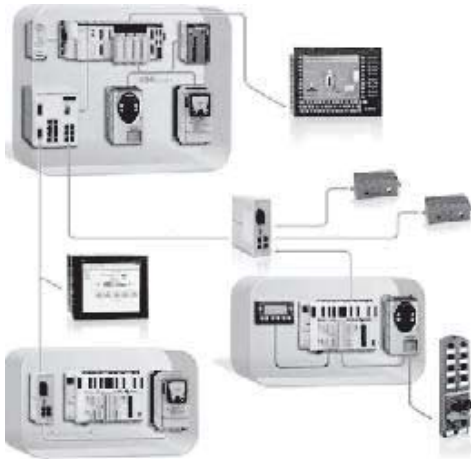
communication. This means it transmits data only when required or on a specified time base. Process data objects can be individually configured. Parameters can be changed at runtime.

CANopen combines ease of installation with inexpensive devices. CANopen provides an integrated equipotential bonding in the cable. Therefore, an additional cable or stranded copper ribbon to achieve the same potential on all network devices is not necessary. Installation costs are heavily reduced.

More information on CANopen and CANopen Products is available in catalog **MKTED208054EN-US**.



**Ethernet TCP/IP Products**



The recognition of Ethernet TCP/IP, both in organizations and on the internet, has made it the communication standard of today. Its wide use is leading to a reduction in connection costs, increased performance and the addition of new functions, which all combine to ensure its durability.

Ethernet TCP/IP meets the connection requirements of every application:

- Twisted pair copper cables for simplicity and low costs
- Optical fiber for immunity to interference and for long distances
- Communication redundancy, inherent in the IP (internet protocol)
- Remote point-to-point access via the telephone network or the Internet for the cost of a local call

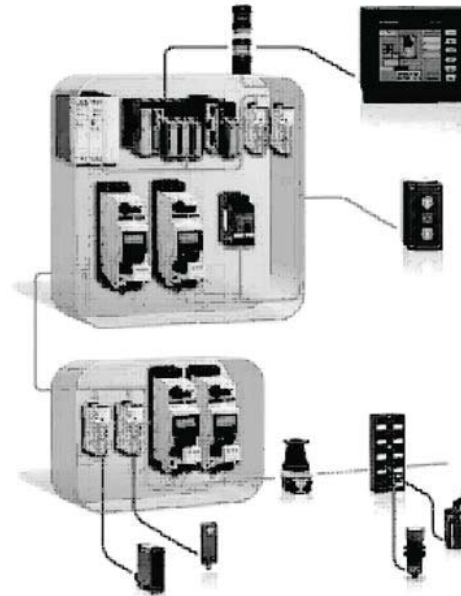
Ethernet TCP/IP, a truly open technology, supports all type of communication:

- Web pages
- File transfer
- Industrial messaging

With its high speed, the network no longer limits the performance of the application. The architecture can evolve without any difficulty. The products or devices remain compatible, ensuring the long-term durability of the system.

More information on Ethernet and Ethernet Products is available in catalog **MKTED208054EN-US**.

**Actuator Sensor Interface (AS-i) Bus Products**



AS-Interface (AS-i) is a versatile, low-cost, easy to-install cabling solution dedicated to distributed machines and installations as a replacement for traditional parallel wiring. AS-i technology is compatible with virtually any fieldbus or device network. AS-i is used as a quick and upgradeable industrial network—a single cable with a quick, open-ended wire system connects all the components in the automation system. It contributes significantly to improve the reliability and availability by reducing cabling errors and offering high-level electromagnetic interference immunity (EMC).

AS-i is an open network standardized in IEC 62026-2 and promoted by AS-International Association.

AS-International has over 260 members worldwide.

More information on AS-International and AS-i Products is available in catalog **MKTED208054EN-US**.

**Modicon™ M168 Programmable Logic Controller**



Modicon M168 programmable logic controllers have been developed for the buildings market – offering HVAC and pump solutions for Building Management System communication networks (BACNet). Four different Modicon M168 logic controllers are available, all of which can be programmed with

SoHVAC software, providing customized applications designed to control:

- Water chiller
- Heat pumps
- Compact air/air roof-top unit
- Air handling system, twin-flow enclosure
- Precision air conditioners
- Refrigerated display windows
- Compressor racks
- Pumping stations
- Booster stations
- Circulators
- Condensate/boiler feed pumps
- Cooling tower pumps

More information is available at [www.schneider-electric.com](http://www.schneider-electric.com) or in catalog **DIA6ED2110101EN-US**.

**Modicon™ M238 Logic Controller**



The Modicon M238 logic controller is a compact, high-performance and fully expandable PLC. It forms a part of Flexible Machine Control approach, a key component of MachineStruxure™, which brings you maximum flexibility and ensures the most optimized control solution. Modicon M238 compact logic controllers offer an “all-in-one” solution in a compact unit (157 x 118 x 86 mm excluding expansion modules). Four models are available, with different embedded communications and supply voltages. The number of I/O can be expanded on all four models by adding up to 7 expansion modules (1) of the following type on the right-hand side of the base unit:

- Digital TM2 DDI/DDO/DMM/DRA
- Analog TM2 AMI/ALM/ARI/AMO/AVO/AMM
- Up to 3 High-speed counter TM200 HSC206DT/DF
- Up to 2 AS-Interface master module TWD NOI 10M3.

Modems or communication gateways can be connected to the serial links in order to expand the connectivity capability to include Ethernet Modbus/TCP, Profibus DP, and DeviceNet.

More information is available at [www.schneider-electric.com](http://www.schneider-electric.com) or in catalog **MKTED211041EN-US**.

**Modicon™ M258 Logic Controller**



The Modicon M258 logic controller is a compact, high-performance and fully expandable PLC. It forms a part of Flexible Machine Control approach, a key component of MachineStruxure, which brings you maximum flexibility and ensures the most optimized control solution. This PLC is

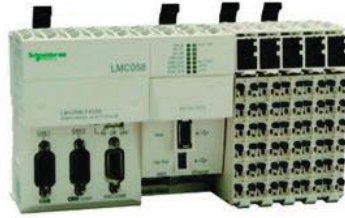
designed for machine manufacturers (OEMs) focusing on applications such as packaging, conveying and storage, textiles and woodworking, etc. It offers high-performance solutions for speed control, counting, axis control and communication functions. The Modicon M258 logic controller's dual-core processor provides extremely high performance. Core 1 is dedicated exclusively to managing program tasks and offers the maximum resources for real-time execution of the application code. Core 2 is dedicated to executing communication tasks, which have no impact on the application performance.

More information is available at [www.schneider-electric.com](http://www.schneider-electric.com) or in catalog **MKTED211041EN-US**.



### Modicon™ LMC058 Motion Controller

The Modicon LMC058 motion controller is the optimum solution for axis control and positioning, including automation functions. It forms a part of Flexible Machine Control approach, a key component of MachineStruxure™, which brings you maximum flexibility and ensures the most optimized control solution. The Modicon LMC058 motion controller meets the needs of a wide range of applications in all business sectors. This motion controller is designed for machine manufacturers (OEMs) who require synchronized axes, focusing on applications such as packaging, conveying and storage machines, metal and wood working machines, etc. and offers high-performance solutions for velocity control, counting, axis control and communication functions. To this end, the LMC058 master motion controller includes as standard a CANopen™ master and a CANmotion master dedicated to control of up to 8 synchronized axes, with a performance of 2 ms for 4 axes. With the Modicon LMC058 motion controllers, Lexium 32 and Lexium SD3 drives, and BSH and BDH servo motors, Schneider Electric offers a complete, high performance and cost-effective solution.



More information is available at [www.schneider-electric.com](http://www.schneider-electric.com) or in catalog **MKTED211041EN-US**.

### Altivar™ IMC Integrated Controller Card for Altivar 61 and Altivar 71 Variable Speed Drives



The Altivar IMC integrated controller card forms a part of Flexible Machine Control approach, a key component of MachineStruxure, which brings you maximum flexibility and ensures the most optimized control solution. The Altivar IMC integrated controller card VW3 A3521S0 is a compact optimized solution developed for Altivar 61 and 71 variable speed drives. When equipped with the ATV IMC card, Altivar 61 and 71 drives become controllers capable of meeting the needs of machine manufacturers (OEMs) in applications such as textiles, hoisting, pumping or woodworking, etc. The Altivar IMC integrated controller card VW3

A3521S0 is configured and programmed using SoMachine software (see page 27-10). The expansion capability of the Altivar IMC card is based on Schneider Electric's "Flexible Machine Control" concept. The Altivar IMC card boosts the expansion capability of machines and allows us to meet the OEM market's requirements in terms of performance, simplicity of use and openness.

More information is available at [www.schneider-electric.com](http://www.schneider-electric.com) or in catalog **MKTED211041EN-US**.

### Magelis™ XBT GC HMI Controller



The Magelis XBT GC HMI Controller offer forms a part of Flexible Machine Control approach, a key component of MachineStruxure, which brings you maximum flexibility and ensures the most optimized control solution. The Magelis HMI Controller offer brings together HMI and control functions within in a single product. This reduces the amount of equipment required and the associated costs throughout the life cycle of the machine. The XBT GC range is comprised of 6 touch screen terminals, with the following, depending on the model:

- 3.8" monochrome screen, 12 integrated inputs/6 integrated outputs (sink or source)
- 5.7" monochrome or color screen, 16 integrated inputs/16 integrated outputs (sink or source)
- A wide choice of communication interfaces: USB, serial link, CANopen and Ethernet

More information is available at [www.schneider-electric.com](http://www.schneider-electric.com) or in catalog **MKTED211041EN-US**.

**SoMachine™ Software Suite**



SoMachine is the OEM solution software for developing, configuring and commissioning the entire machine in a single software environment, including logic, motion control, HMI and related network automation functions. SoMachine allows you to program and commission all the elements in Schneider Electric's Flexible and Scalable Control platform, the comprehensive solution-oriented offer for OEMs, which helps you achieve the most optimized control solution for each machine's requirements. Flexible and Scalable Control platforms include:

**Controllers:**

- HMI controllers: XBT GC, XBT GT/GK CANopen
- Logic controllers: Modicon M238, Modicon M258
- Motion Controller Modicon LMC 058
- Integrated Controller Card Altivar IMC
- TM2, TM5 and TM7 offers

**HMI:**

- HMI Magelis graphic panels: XBT GT, XBT GK

SoMachine is a professional, efficient, and open software solution integrating Vijeo™ Designer. It integrates also the configuring and commissioning tool for motion control devices. It features all six IEC 61131-3 languages, integrated field bus configurators, expert diagnostics and debugging, as well as outstanding capabilities for maintenance and visualization.

More information is available at [www.schneider-electric.com](http://www.schneider-electric.com) or in catalog **MKTED211041EN-US**.

**Twido™ Nano™**



The Twido Nano PLC is a feature-rich ultra-compact controller designed especially for small control systems. Flexible, affordable, and adaptable, Twido makes it easy to build just the right control solution for your customer's application. Offering software with graphical

development, the Twido Nano PLC makes it easy to create, configure, and manage applications. Communication options include CANopen, Ethernet TCP/IP, Modbus, and ASI. More information is available in catalog **DIA3ED2090202EN**.

**Modicon™ Zelio™ Logic Controller**

To meet the demand for applications that require more flexibility than a simple relay, timer or counter, but are too small or simple for the smallest Nano PLC, the new generation of Zelio Logic smart relays are now available. Designed to accept and control outputs just like a relay, Zelio Logic features dual language capability, using either Function Block Diagram (FBD) or Ladder Logic Programming (LL), and can easily be programmed by using either the front panel or by utilizing ZelioSoft software. This new generation of Zelio Logic smart relays provides customers with considerable gains from the design stage to the monitoring of their applications, due to its simplicity and flexibility.

More information is available at [www.schneider-electric.com](http://www.schneider-electric.com) or in catalog **DIA3ED2051002EN-US**.

