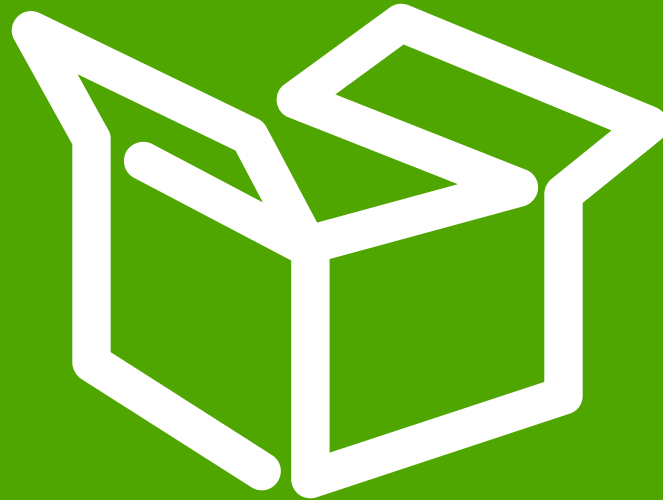


Modicon M340

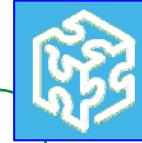
The all-in-one PAC



Schneider
Electric

Modicon PAC family

Powered by Unity



Modicon Quantum

Process Automation

Critical Infrastructures



Modicon Premium

Advanced Machines

Manufacturing

Large Infrastructures



Modicon M340

Mid-size Infrastructures

Complex Machines





**What are the
Modicon M340
values**



“ Launched as one of the most innovative Programmable Logic Controllers developed to date, Modicon M340 continues to be perceived as a model basis of a modern-day automation platform, garnering recognition for its robust quality and high-end capabilities, including improved performance, compliance with the latest networking standards, and operational cost-efficiency.

Designed for a widely range of process and machine management, it finds perfectly his place in numerous segments such as the WWW, MMM and the Food & Beverage.

Modicon M340 Launch Director

Benefits at each stage of your application life cycle



Powered by
Unity Pro,
the common
software of
the Modicon
PAC range

Integrated simulator



Minimize the risk

Reduce cost

Flexible installation

Tested,
Validated
and
Documented
Architectures

6 languages



Easy installation

Fast set up

Efficient debug tool



Modules hot-swapping

Integrated diag viewer



Native diagnostics

Remote maintenance

Faulty device replacement

FDT / DTM



Process libraries



Optimized performances

Reliability

Easy evolution



Reduced to the maximum ... and expandable

Flexible

4, 6, 8, or 12-slot racks

Up to 4 racks



Compact

Height 100 mm

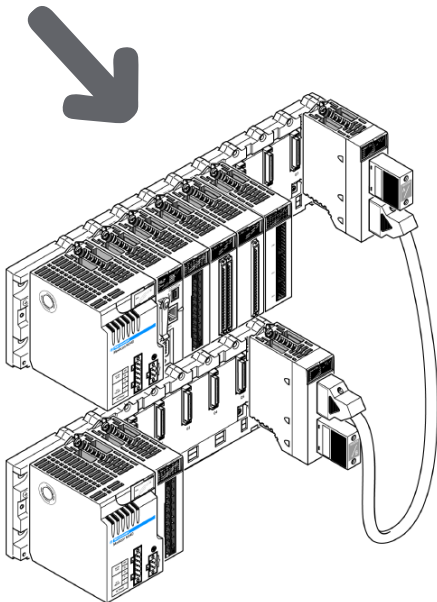
Depth 93 mm

Width 32 mm

High Density

64 DIO channels within 32 mm

8 Analog IO channels on TB(*)



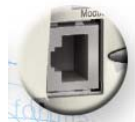
Expand your
configuration
without stopping
your process on
M340 RIO drops
(CCOTF)

(*) Terminal Block

Integrated offer with up to 3 built-in communication ports



USB
UNIVERSAL SERIAL BUS



Ethernet



Modbus

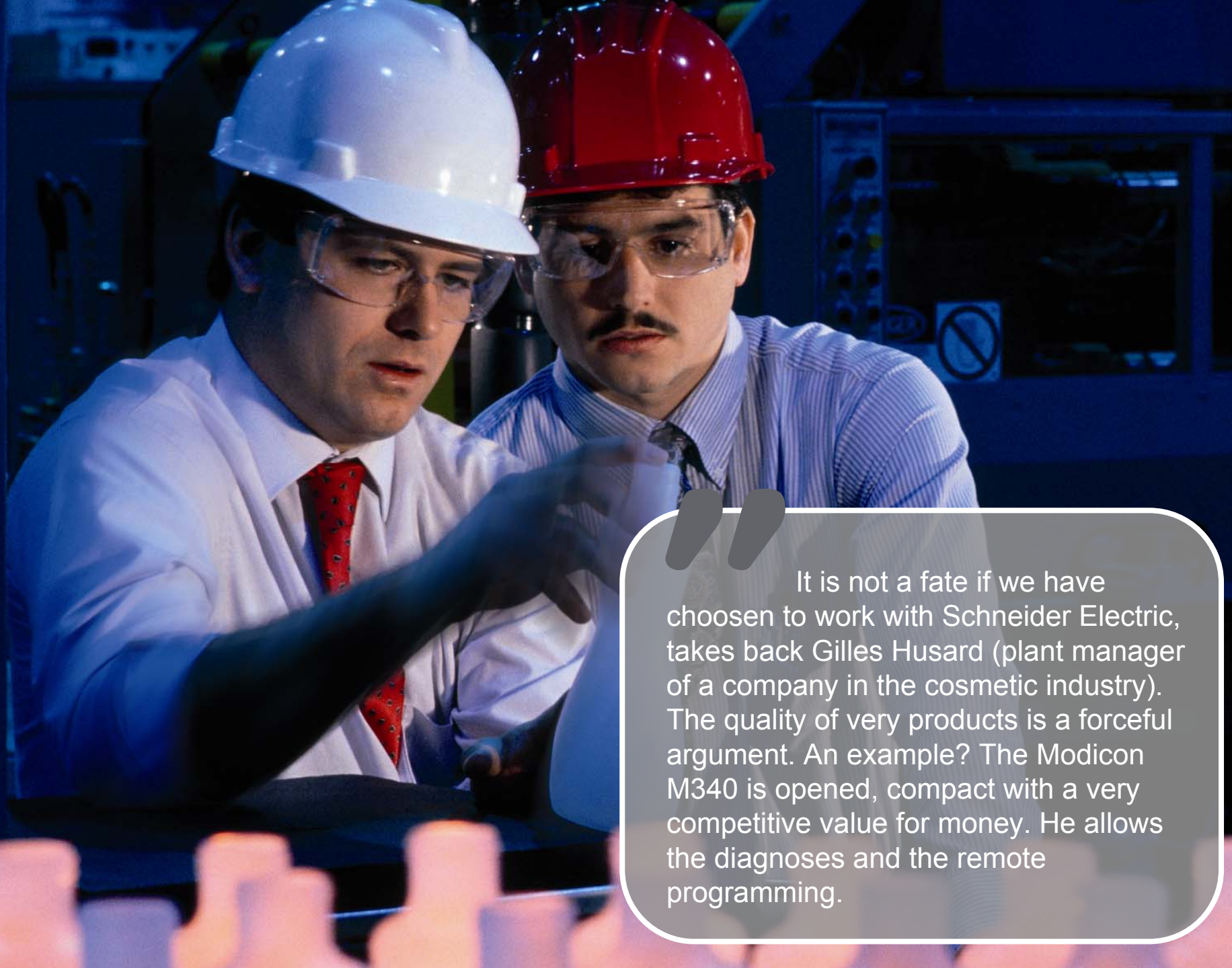


CANopen

	P34-1000	P34-2000	P34-20102	P34-2020	P34-20302
USB	✗	✗	✗	✗	✗
Ethernet				✓	✓
Modbus	✓	✓	✓	✓	
CANopen			✓		✓



**Much more
than a simple
PLC**



“ It is not a fate if we have chosen to work with Schneider Electric, takes back Gilles Husard (plant manager of a company in the cosmetic industry). The quality of very products is a forceful argument. An example? The Modicon M340 is opened, compact with a very competitive value for money. He allows the diagnoses and the remote programming.

Multi-usages platform



Performance PLC

9 CPU references to provide the just enough PLC



Modular RTU

IEC 101/104 & DNP3 communication capabilities

Non permanent communications management



Distributed I/O

Ethernet non-deterministic communications with any Unity PLC



Remote I/O

Ethernet deterministic communication with Quantum

available from July 2012

“Plug and Load” memory card

Need to update your system on site ?

No software to use on site ...

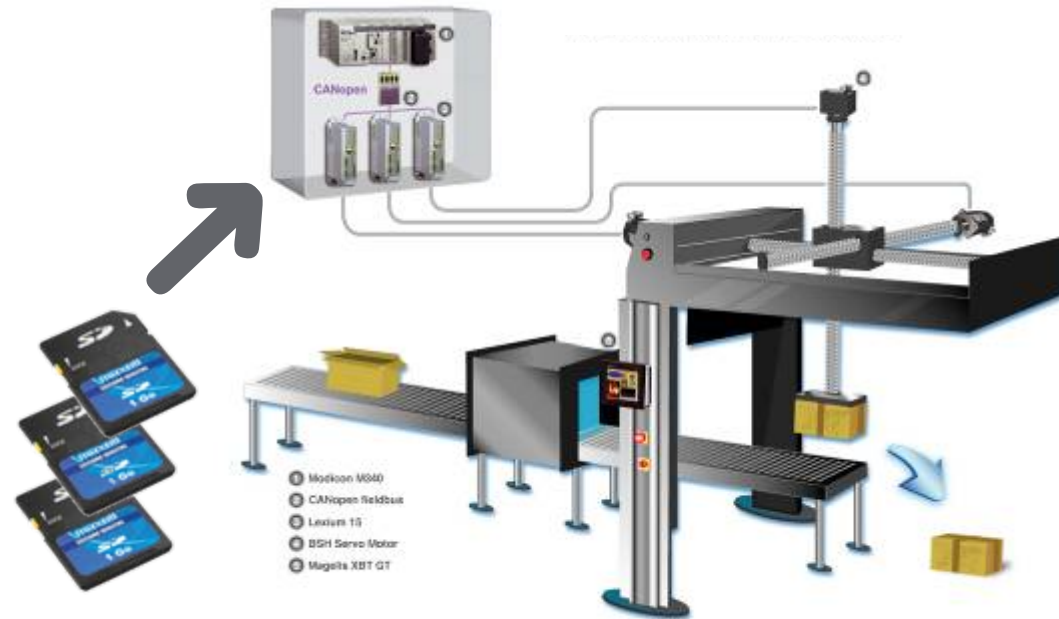
... just plug the new card and power ON !

Need to duplicate your application ?

Use 1 SD card to load the other ones thru the CPU

... or just from your PC !

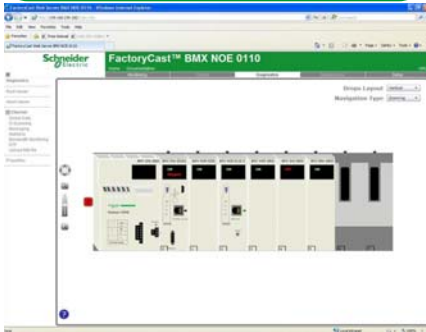
Industrial
SD Card
format



Embedded monitoring and diagnostic web server

With CPU & NOE0100

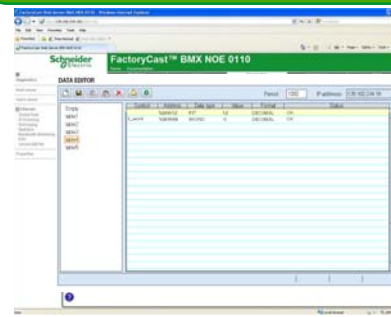
Rack View



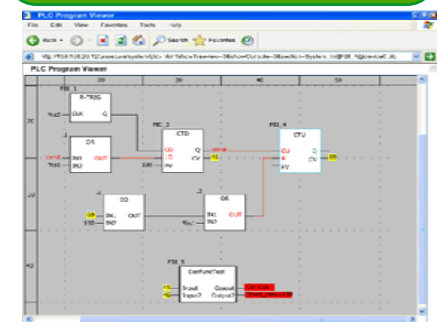
Remote Diagnostic



Remote & pocket Data Editor

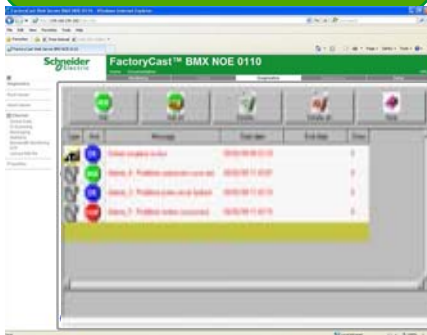


Program View



With NOE0110

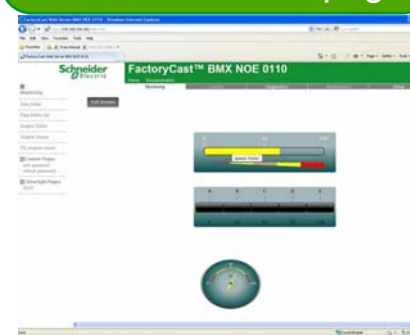
Alarm View



Graphic Data Editor



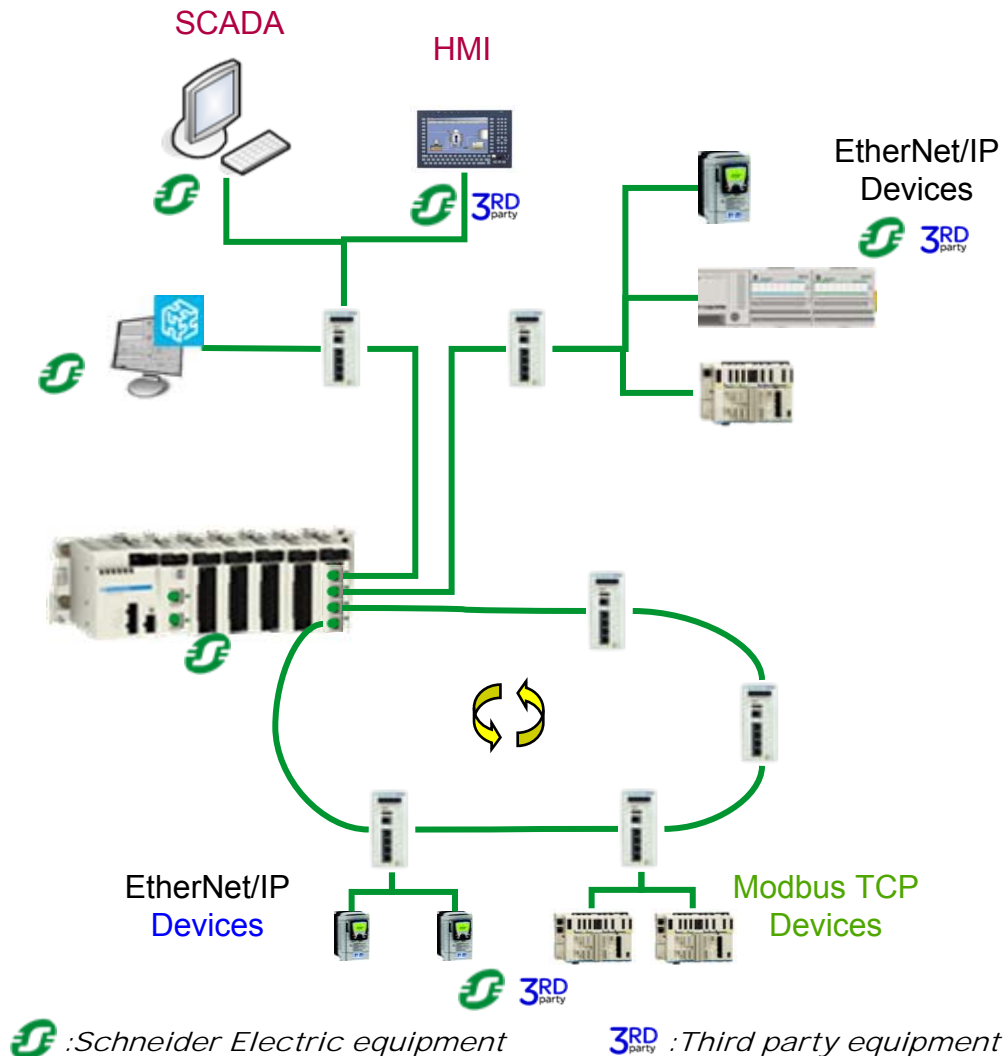
Customized Web page



SOAP/XML Web services

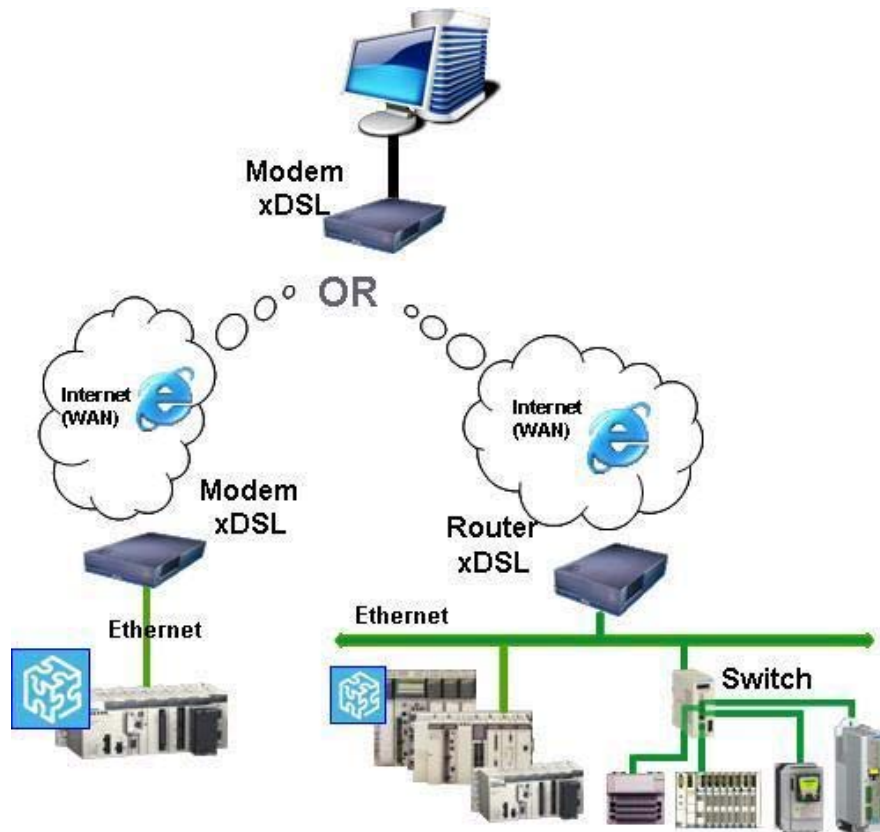
Standardization of Data access using SOAP protocols (MES, ERP, Excel, ...)

Multi-port Ethernet module to do more with less



- **One module for all communications**
 - Modbus TCP
 - EtherNet/IP
- **Embedded switch**
 - 4 Ethernet ports
 - IGMP filtering
 - QoS sorting
 - Port mirroring for troubleshooting
 - Configured through Unity Pro and Web
- **Ring topology support**
 - 2 ports to support ring topologies
 - RSTP-based topology recovery
 - Up to 32 nodes
 - Module performance (Max. 15ms fault detection)
- **Full services range**
 - IP addressing server
 - FDR server
 - Access control
 - ...

Easy connection whatever the location



Use any standard modem !

Connection: Serial, Ethernet

Network: PSTN/LL, GSM / GPRS / Radio, DSL

All services available from home !

On-line programming

Program download

Diagnostic via the system web-server

Remote monitoring via HMI web-server


Data files transfer

Motion Plug'n Move solution





**Quality
first**



Compact and powerful, the Modicon M340 programmable automation controller becomes integrated perfectly into the most demanding automated processes, that it is about the world of the industry or about the domain of infrastructures. It bases on the know-how and the tried solutions which are at the origin of the success of this product. The quality was always a major stake from the conception of the range, and since a few months, we benefit from a rate of 0 defect on the CPU!

Modicon M340 Marketing product manager

Maintenance has never been so simple



There is no battery inside !

Source Program is saved in the Memory card

Data saved in internal Flash memory on Power Off

Easy replacement of modules when the PLC is running

Hot-Swap capability

Automatic software re-configuration by the CPU



Robust !












Offering more than the standards

	Modicon M340	vs.	IEC
Mechanical constraints			IEC60068-2
Shocks [27 Ea]	30 g	x 2	15 g
Vibrations [6 Fc]	3 g	x 3	1 g
Electrical immunity			IEC61000-4
Radiated field	15 V/m	+50%	10 V/m
Electrostatic discharges	8 kV	+30%	6 kV
Environment immunity			IEC61000-4
Temperature	0 ... 60°C	+5°C	0 ... 55°C
	Hardened offer M340H : -25 ... 70°C		
Altitude	4,000 m	X 2	2,000 m

Marked !

Certified

International standards

		CE
		UL
		CSA Class I, Div 2
		C-Tick
		GOST R
		IEC61850

Marine standards

		ABS
		BV
		GL
		RMRS
		DNV
		RINA
		LR
		PRS (Poland)



**Ready
for the
future**

A photograph of four business professionals standing in a row in front of a modern glass-walled building. From left to right: a woman with short brown hair in a dark blazer, a man with short grey hair in a dark suit and light blue tie, a man with short dark hair in a white shirt, and a woman with long dark hair in a light blue blazer. The man in the center has his arms crossed and is looking directly at the camera. The woman on the far right is smiling.

The M340 is at the heart of the Schneider Automation strategy. We'll continue to invest a lot on this range in the coming years. We capitalize on this platform for our future developments through Modicom X80 I/Os. M340 brings also its values in many of our PlantStruxure architectures and EcoStruxure solutions.

Modicon PAC Marketing Director

Future proof

Update your Installed Base

New CPU firmware V2.4 with LL984 support (UnityPro V6.1)

Legacy Quick wiring solutions

Keep forward moving family

Twice a year CPU functionalities upgrade

New version of RTU module V1.5 with enhanced protocol

Coming soon...

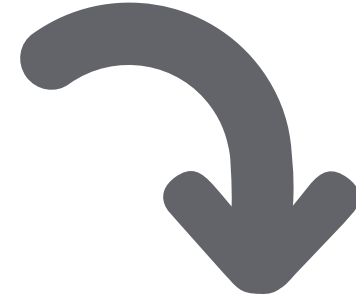
Ethernet/IP remote IO module (CRA) for Quantum

New NRP module to convert Ethernet fiber into copper

New ERT module for high precision time stamping

... and later

Mx80 family to reuse all your M340 I/Os for an easy evolution



Modicon M340
is compatible
with the future
Schneider Electric
offer

Selection guide

Large choice of communication interfaces

From devices level to plant level

In-rack communications modules

1 Ethernet/IP Module



- Ethernet/IP & Modbus/TCP

1 Serial Link Module



- 2 isolated channels RS485 & RS232

2 Ethernet TCP Modules



- Ethernet Modbus TCP

1 RTU Module

- 2-channel RTU module

1 AS-I Module



- 1 channel M4 Master supporting V3 standard

In-rack expert modules

1 Motion control

- Pulse Train Output module to control variable speed drives

1 Encoder module

- SSI absolute encoder

2 Counting Modules

Remote Master

1 Profibus DP Master



- Profibus V2 Remote Master
- Plugged on Ethernet
- Master DTM for Unity V5.0
- Certified
- Hardened version available

1 Modbus+ Gateway

- Support both PeerCop and Global Data services



An IO Catalog of 29 modules

Digital inputs (9)

Module	Voltage	Number of channels
DDI	24 VDC	16, 32, 64
DDI	48, 125 VDC	16
DAI	24, 48 VAC	16
DAI	110, 230 VAC	8, 16

Digital inputs/outputs (3)

Module	Voltage	Number of channels
DDM	24 VDC	8 or 16 DI and DO
DDM	24 VAC	8 or 16 DI and DO

Digital outputs (8)

Module	Voltage	Current	Number of channels
DDO	24 VDC	0.5 A	16
DDO	24 VDC	0.1 A	32, 64
DAO	100...240 VAC	0.6 A	16
DRA	24, 125 VDC	0.3 or 2 or 3 A	8, 16
DRA	24 ... 240 VAC	2 or 3 A	8, 16

Analog inputs (5)

Module	Measuring range	Resolution	Number of channels
AMI	Voltage	16 bits	4, 8
AMI	Current	16 bits	4, 8
ART	Resistor	16 bits	4, 8
ART	Thermocouple	16 bits	4, 8

Analog inputs/outputs (1)

Module	Measuring range	Resolution	Number of channels
AMM	Voltage/Current	14/12 bits	4 IN and 2 OUT

Analog outputs (3)

Module	Measuring range	Resolution	Number of channels
AMO	Voltage	16 bits	2, 4
AMO	Current	16 bits	2, 4, 8

Modicon M340

Success

M340 key figures

- 
- More than **100 000 PLC** sold in the world from 2007 launch
 - **+26%** growth in 2011
 - **60M€** turnover in 2011 with more than **35 000 configurations** sold
 - Worldwide footprint, **one of the most famous PLC in the world !**

Modicon M340 inside!

