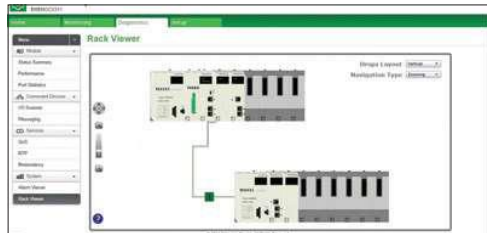
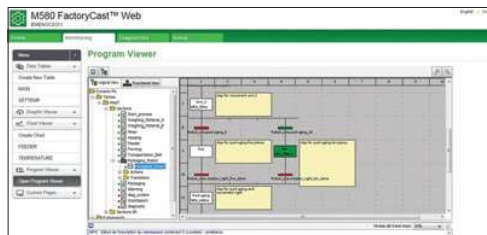




Customizable HTML5 Home page



Diagnose architecture from web browser



Simple application maintenance from web browser

BMENOC03•1 network modules act as an interface between the M580 PLC and other Ethernet network devices via the Modbus/TCP and EtherNet/IP communication protocols.

BMENOC03•1 network modules are standard format and occupy a single slot in the rack of the Modicon M580 platform. They have to be installed in the main Ethernet + X-bus backplane rack.

Functions

BMENOC03•1 modules offer the following functions:

- Modbus/TCP and EtherNet/IP protocols operating simultaneously
- Ring topologies on 2 Ethernet ports using RSTP (Rapid Spanning Tree Protocol)
- Priority of Ethernet packets using QoS (Quality of Service) service
- Automatic module configuration recovery using FDR (Fast Device Replacement) service
- Embedded web server for application monitoring and module diagnostics
- Sharing data between PLCs
- Network management using SNMP (Simple Network Management Protocol)

FactoryCast

The **BMENOC0311** FactoryCast module provides additional web-based visualization of ePAC diagnostics and system data, such as:

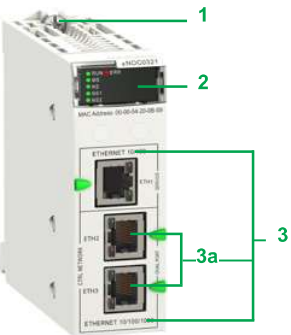
- Custom web pages: allow the user to define a personalized interface
- Rack Viewer: provides a graphical representation of the configured ePAC system including all modules and I/O status
- ePAC Program Viewer: provides a web-based view of the Unity Pro program code that animates logical states and variable values
- Customizable dashboard: allows a customized widget to be added to provide an optimum overview of the process data
- Trend Viewer: provides a graphical visualization of the variables
- Easy brand labeling: website logo and colors can be adjusted online

The customizable HTML5 Home page can display process values. It is compatible with the majority of operating systems on smartphones and tablets, such as Andoid, IOS, and Windows. By logging in from a common web browser, it is easy to diagnose the architecture, and perform simple maintenance without Unity Pro software.

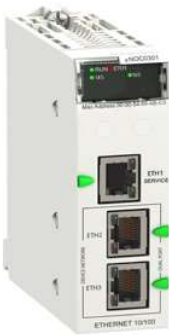
Embedded router

The **BMENOC0321** embedded router provides bridge transparency from the control network to the device network and connectivity with functions such as:

- Embedded IP forwarding: enables communication from the control network to PACs, PLCs, PCs, HMIs, etc.
- IPsec feature: applicable when the IP forwarding function is disabled
- Time synchronization: to be able to synchronize with external time servers and update the internal clock
- SMTP (Email): to send messages and alerts about the ePAC system
- Switch embedded in the M580 platform: provides a direct connection to the processor without any cable, and no separate power supply is required
- Fast Device Replacement service
- Multiple diagnostics: supports advanced web pages to FactoryCast, MB Diagnostics, EIP Diagnostics, CNM (ConneXium Network Manager)



BMENOC0321



BMENOC0301



BMENOC0311

Description

The front panel of **BMENOC03●1** modules features:

1 Screw for locking the module in a slot in the rack

2 Display block with 4 LEDs:

- RUN LED (green): Operating status
- ERR LED (red): Error detected
- MS LED (green/red): Module status
- NS LED (green/red): Network connection status

Additionally for **BMENOC0321** modules, 2 LEDs are displayed as:

- NS1 LED (green/red): Ethernet network status
- NS2 LED (green/red): Ethernet network status

3 3 RJ45 connectors for connection to the Ethernet network; the 2 bottom connectors **3a** support ring topologies (RSTP protocol)

Each RJ45 connector has 2 associated LEDs:

- LNK LED (yellow): Ethernet link established
- ACT LED (green): Transmission/reception activity

References

Description	Data rate	Reference	Weight kg/lb
EtherNet/IP, Modbus/TCP network module	10/100 Mbps	BMENOC0301 (1)	0.200/ 0.441
FactoryCast network module	10/100 Mbps	BMENOC0311 (1)	0.200/ 0.441
Embedded router network module	10/100 Mbps	BMENOC0321 (1)	0.200/ 0.441

(1) The Unity Pro configuration tool is supplied on CD-ROM with the module. This software is used to update the Unity Pro hardware catalog (addition of the new module DTMs).