

ASIC/3 Features

32-bit ARM9 processor

100Mb Ethernet and optional wireless

BACnet communication

System Bus for ASI or BACnet MSTP communication

2 Local Buses for ASI and/or Modbus Master RTU

Compatible with ASI WebLink & ASI Data Server products

USB Device Service Port

Isolated switching power supply for AC or DC operation

10 Year hardware clock

Two-part screw terminal input, output and power connections

16 Universal Inputs

16 Binary Relay Outputs

8 Analog Outputs

NEMA-1 Industrial Control Panel

Power Supply

ASI Controls ENC-9540 control panel is a complete package designed for energy management and control of mechanical systems. An ASIC/3-9540 configurable controller is mounted inside the panel.

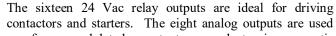
The ASIC/3 Programmable System Controller represents a new generation of communicating distributed direct digital control for unitary equipment and building systems. The ASIC/3 controller is designed to be hardware compatible with the ASIC/2 Programmable controllers and offers expanded communication capability including USB, BACnet, Ethernet and Wireless.

The ASIC/3 provides energy management and control of a wide range of building systems including air handlers, chillers, cooling towers, boilers, pumps, lighting, etc. It has an isolated switching power supply for AC or DC operation and flash memory for program and data storage.

The controller is easily configured using ASI Visual Expert configuration software that links ready-made objects including scheduling, logic, PID control, alarming, optimum start, trending, run-time accumulation, and electrical demand management. The ASIC/3 has an on-board battery-backed calendar clock and allows special events, holidays, and schedules to be defined in advance. Configuration data is stored in non-volatile memory that is retained through power loss.

The ASIC/3 controller has three separate RS-485 system and local buses. The system bus is used to network multiple ASIC/3 and ASIC/2 controllers, or optionally the system bus can support BACnet MS/TP. Two local buses can poll ASIC/1 terminal controllers and make control decisions based on the data received. No central system is needed to supervise the controller. Alternately either local bus can support Modbus Master RTU. Red and green LEDs indicate the controller's receive and transmit communications.

The ASIC/3 can operate as part of a larger communicating control network. The ASIC/3 offers Ethernet communication and alarm notification via wired 10/100 Mbps connection or optional WiFi module. The ASIC/3 also features a full-speed 12 Mbps USB Device connection for service in the field. The RS-485 connections support baud rates up to 57,600 bps, and standard BACnet MSTP baud rates up to 76,800 bps are also supported.



for modulated actuators, electronic-pneumatic transducers, variable speed drives and other analog signal devices. The 16 universal inputs may be used for counting pulses, for reading thermistors and contact closures directly, and for reading 4 to 20 mA, 0 to 5 Vdc or 1 to 5 Vdc input signals.

DOC-1720 (2014-05-06)



ENC-9540

Control Panel with Controller

Features

Analog Inputs	Binary Inputs
Maintained Binary Outputs	Pulsed Outputs
Analog Outputs	_

Scheduled Start/Stop Calendar Events Multiple Control States Counters and Timers Conditional Logic Notify Alarm Configuration

Afterhour Override Special Day Schedules Multiple PID Loop **Optional Demand Limit**

Value Trending

Ethernet Communications **Optional Wireless** Remote Point Broadcast Message Pass-thru Local Bus Broadcast Local Bus Polling Brownout Protection Hardware Clock Optional Modbus Master RTU Optional BACnet MS/TP

Specifications

Power Supply (Isolated)

Supply Voltage: 24 Vac +/- 15%, 50/60 Hz or +/- 24 to 48 Vdc Power Consumption: 27 VA (plus loads) Protection: PS8, Polyswitch, MOV Connection 2-part screw terminal Red LED Indication

Binary Outputs 16

Type:

Voltage Rating: Current Rating: Connection Indication

Analog Outputs 8

Type: Resolution: Current Rating: Protection: Connection

Aux Power

Aux Power:

Connection

Inputs 16

Type: Range: Accuracy: Connection

Universal Analog/Binary 0 to 5 Vdc 0.1% full scale 2-part screw terminal

Form "A" Relay SPST N.O.

Class 2, 24 Vac or 24 Vdc

Dry Contacts

1 A General Use

Analog 0-10Vdc

0.4% full scale

20 mA

2-part screw terminal Red LED, Binary Outputs

TVS, 10 V, 600W peak

2-part screw terminal

5 V. 100 mA max

12V. 100 mA max

fixed screw terminal

UL Listing

UL-916 Open Energy Management Equipment File E123287 (PAXZ) Rated as a Class 2 Device Canada: C22.2 No. 205-M1983

CE

Meets CE requirements. EN 61326 Class A, EN 61000-3-2 Class A and EN 61000-3-3 Complies with FCC Part 15 (CISPR 22) Class A

RS-485 Communications (3)

RS-485 with optional 120 ohm Termination Baud Rate: Up to 57,600 bps Protection: 500 mW-s TVS with 100 mA Polyswitch 4000 ft (1.2 km) RS-485 Maximum Length: Connection: 3 Position, screw terminals Indication: Red LED Receive, Green LED Transmit

System Bus Communication

Address Range:	1 to 65535 except for group and global addresses	
Maximum Size:	Up to 255 devices with repeaters	
Alternate Protocol:	BACnet MS/TP 76,800 bps	
Local Bus Communication		
ASI Address Range:	1 to 65535 except for group and global addresses	
Maximum Size:	Up to 64 devices with repeaters	
Alternate Protocol:	Modbus Master RTU	

Ethernet Networking

Communication: UDP/IP or TCP/IP; auto-sense 10 Mbit/s or 100 Mbit/s Note: Requires 100 MHz Ferrite Core on Ethernet cable. XBee Module Ready **Optional Wireless:**

Internal Power Supply

120 Vac, 50/60 Hz Supply Voltage:

Panel

Format:

Panel:	NEMA Type 1 Industrial Control Panel
Dimensions:	20" x 18" x 6"
Weight:	approx. 22 lb (10 kg)
Panel UL Listed:	E182943
Environmental	
Operating:	-20 to 45 °C (-4 to 113 °F)
	10 to 95% RH non-condensing
Storage:	-37 to 80 °C (-35 to +180 °F)
C	5 to 95% RH non-condensing

How to Order:	Order Number
Control Panel with Controller	ENC-9540

Accessories:	Order Number
Four Input Multiplex Kit	QUADMUX

Software & Documentation:	Order Number
ASI Expert Configuration Software	ASI Expert
ASIC/3 Object Definitions	ASIC3 OBJ DEF
ASIC/3 Installation Guide	ASIC3 Manual

US