

Overview

The EasyIO-30P-SF Controllers are rugged, network centric, high performance multi-protocols Input/Output controllers to accommodate general and specific applications, featuring Bacnet IP, Bacnet Ethernet, Bacnet MSTP, Modbus Serial (RS485) and Modbus TCP/IP protocols plus a built-in Web server for easy configuration. Now, EasyIO-30P supports **Sedona Framework™** which provides complete software platform for developing, deploying, integrating, and managing device applications at the lowest level.

Sedona Framework™
Bacnet® IP, Ethernet, MSTP
Modbus RS485, TCP/IP
Web-enabled, Network Centric



Features:

➤ **Sedona Framework™**

Supports the newest, Sedona Framework™ which is the industry's first, open source development framework that provides a complete software platform for developing, deploying, integrating, and managing pervasive device applications at the lowest level. The Sedona Framework™ distributes decision making control and manageability to any device and brings intelligence and connectivity to the network edge and back. Now, system integrator is able to develop their own application based on the Sedona Framework™.

➤ **Web Browser Configuration**

Built-in Web server enables configuration with popular web browser over an Ethernet connection. I/O status can be monitored over the Internet connection.

➤ **High-Speed Data Rates**

Multiple serial communication (RS485) speed selection from 9.6kbps to 115.2kbps. Supports Ethernet 10Base-T/ 100Base-T interface, half or full duplex.

➤ **As Bridge Controller**

The controller can be configured as Bridge Controller providing a network bridge for Ethernet and serial communication (RS485) via built-in protocol converter (for Modbus only). This will reduce wiring cost, simplify network implementation and significant cost

➤ **Device ID**

Complementing existing standard protocols, EasyIO-30P can be uniquely identified over the network. This facilitating online network device search and simplify reconfiguration.

➤ **Network Security**

All configurations changes are protected via password setting, either through standard network protocol access (Modbus) or web

➤ **Multiple Input/Output Type**

The controller has eight Digital Inputs, eight Analogue Input for current, voltage, resistance and temperature sensor, eight Digital Outputs (relay), four Analogue Output (current and voltage), and two isolated Open Collector outputs (with PWM control) for high

➤ **High Accuracy Analogue Channels**

High speed 14-bits A/D converter with programmable gain amplifier yields a high resolution and accuracy reading on 12-bits D/A provides more accurate analogue output control.

➤ **Online Help/Information**

All related information/helps are available through the controller web server. Information such as registers details, wiring diagram, device specification and etc are provided to assist the user.

➤ **Status Indicator**

Operational activity on each individual channel of DI, DO and Open Collector Outputs (PWM) are conveniently indicated by LED, so as the Power, Operation, Communication and Faults status.

➤ **Reset**

A Reset Switch has been provided for system reset without power removal (Warm Start operation).

➤ **Online Firmware Upgrade/Configuration**

The controller firmware can be upgraded either through RS485 or Ethernet connection. Network communication and operation parameters can be changed via RS485/Ethernet with the built-in boot-loader and terminal program.

Device Specifications

Electrical

Power Supply: 24VAC, 3.6VA max, or 20 ~ 34VDC
Consumption: 150mA max @ 24VDC
Operating Temperature: 32° to 150° F (0° to 65° C)
Storage Temperature: -4° to 150° F (-20° to 65° C)
Operating Humidity: 10% to 95% relative humidity non-condensing

Communication

Physical Interface 1 (Port 1):
- EIA-485 (BUS A,B) Two-wire
- Half Duplex
- Baud Rate Speed: (9.6K, 19.2k, 38.4K, 115.2K bit/s)
- Data Bit: (8 bits)
- Parity: (None, Even, Odd)
- Application Protocol: Bacnet MSTP, Modbus Serial
- Multi-drop Capability: Yes, Slave (hardware ID setting)

Physical Interface 2 (Port 2):

- Ethernet 10/100 Base-T
- Ethernet Support: IP, TCP, UDP, ICMP, IGMP, FTP, HTTP
- Application Support: Bacnet IP, Bacnet Ethernet, Modbus TCP and Sedona Sox.

Input/Output Configuration

Universal Input:
- 8 Channels
- Voltage: 0 - 10V (+/-0.005V), 0 - 5V (+/- 0.003V)
- Current: 4 - 20mA (+/-0.01mA), 0 - 20mA (+/-0.01mA)
- Resistance: 0 - 30K (+/-10 Ohm), 0 - 10K (+/-5 Ohm), 0 - 1.5K (+/-1 Ohm)
- Thermistor: 10K, 10K Shunt, 1K Balco, 1K Platinum : All (+/-0.01°C

Digital Input:

- 8 Channels
- Type: Voltage Free
- Limit: +5V at 500Ohm Resistance maximum

Digital Output:

- 8 Channels
- Type: Relay Contacts, SPST NO, 48VA at 24VAC, Pilot Duty

Transistor Output:

- 2 Channels
- Type: Open Collector Output, Isolation 3.75KV
- Max Rating: 1A, 60V

Analogue Output

- 4 Channels (12 bits resolution)
Type: Current: 0 - 20mA, 4 - 20mA (up to 800 Ohm load), Voltage: 0 - 10V

Mechanical:

- Dimension: 187mm x 110mm x 47mm
- Material: UL94 ABS
Weight: 400g

Built In Function Blocks

Input/Output

- 1) Digital Input
- 2) Digital Output
- 3) PWM Control (Open Collector Output)
- 4) Analogue Input
- 5) Analogue Output
- 6) Totaliser
- 7) Pulse Accumulator

Sedona Native Functions

- 1) Time & Schedule Management
- 2) Timer Management
- 3) Special Functions like PID
- 4) Modbus
- 5) Bacnet
- 6) Digital Input
- 7) Digital Output
- 8) Analog Input
- 9) Analog Output
- 10) PWM
- 11) Pulse Accumulator
- 12) Totaliser

www.infocon-technology.com

Singapore

101 Cecil Street, #09-07
Tong Eng Building, Singapore 069533
+65.6.325.6083 Phone
+65.6.226.3040 Fax

Malaysia

32-3 Jalan Puteri 2/4, Bandar Puteri,
47100 Puchong, Selangor D.E, Malaysia
+60.3.8063.7571 Phone
+60.3.8063.7572 Fax

Agency Listings :



All specifications subject to change without notice or liability to provide changes to prior purchasers. Information and specifications published here are current as of the date of publication of this document. EasyIO, reserves the right to change or modify specifications without prior notice. The latest product specifications can be found by contacting our corporate headquarters, Singapore. Products or features contained herein may be covered by one or more U.S. or foreign patents. © 2006-2007 Infocon-Technology.