

## Multipurpose Integration Device and BACnet Router

### HARDWARE FEATURES

- 9-36VDC Supply (match to sensors)
- BACnet MSTP-IP Router\*
  - BBMD functionality (optional)
- 5 Analog Sensor Inputs
  - 0-10V or Pulsed Sensors (4-20mA available on special request)
  - Advanced Value Processing
- Flexible Integration
  - BACnet MSTP—RS485 Ports
  - BACnet IP\*—RJ45 Port
  - RS232 ASCII Serial Interface
  - 6 Configurable Contact Closure Outputs
- Pluggable Connectors for Easy Installation
- Programmable through network or on-board Micro-USB

\*Only available on IP Variants

### WORKS WITH...

- Solarai Control Networks
- 3rd Party BAS/BMS Systems
- And more...

### BACnet NATIVE

No gateway device required for BMS integration



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## Product Overview

Embedia's Solarai ControlPoint is a highly flexible and adaptable, multipurpose integration device. As a native BACnet device it is interoperable with 3rd party systems and capable of forming part of any BACnet MSTP network. IP variants additionally serve as BACnet routers enabling communication between MSTP and IP networks, allowing existing IP infrastructure to be used for Building Management System (BMS) / Building Automation System (BAS) integration as well as scaling of control networks beyond the 127 device BACnet/MSTP limit.

The ControlPoint's 5 analog sensor inputs can be used to integrate various types of sensors (sun, wind, rain, etc) into a Solarai control network. Sensor value processing,

### CONTROL HIGHLIGHTS

- STANDARDIZED INTEGRATION
  - BAS/BMS (BACnet MSTP or IP)
  - AV SYSTEMS (ASCII Command String)
- DISTRIBUTED INTELLIGENCE
  - SCALABLE—MSTP-IP ROUTER
- ROBUST AND SECURE
- ENHANCES ENVIRONMENTAL MODELING
  - SOLAR PATH TRIGGERS / RESPONSES
  - ADVANCED SCHEDULING
- FULLY PROGRAMMABLE
  - SENSOR RESPONSE PROFILES
  - HYSTERESIS AND DELAYS
  - PRIORITY BASED CONTROL
  - CUSTOMIZABLE LOGIC
- NETWORK—WIRED (BACnet MS/TP)
- NETWORK—WIRED (BACnet IP) (-IP variants only)
- Micro-USB PROGRAMMING INTERFACE

paired with the fully programmable response profiles on Solarai motor controllers, may be used for enhanced control based on real world environmental conditions.

An RS232 ASCII serial interface and 6 programmable contact closure outputs are provided for easy integration with 3rd party Audio/Visual (AV) or BMS/BAS systems.

With pluggable connectors and all network parameters settable through the onboard display, installation and configuration is simple. More advanced programming can be performed over the network or through the provided Micro USB port.





## COMPANION PRODUCTS

### Solarai Motor Controls

- EB2 GROUP / PLUS
- EB4 GROUP / PLUS

### Brightness Sensors

- SENSOR-SUNOMNI-0TO10V
- SENSOR-SUNLOWA-0TO10V
- SENSOR-SUN3DIR-0TO10V
- SENSOR-SUNINTS-0TO10V

### Wind Sensors

- SENSOR-WINDSPEED-PULSE

### Control Panel Software

- Graphical User Interface for Advanced system Management

## WARRANTY

All Embedia products carry a standard 2-year product replacement warranty. Extended 5 and 10 year warranties are available.

For more information on any of our products or services please visit us on the Web at: [www.embedia.com](http://www.embedia.com)

## Technical Specifications

Parameter	Specification
Low Voltage Supply	9-36 VDC ; 2.1mm ID x 5.5mm OD Barrel Connector (Center Positive)
Sensor Inputs	5 x 0-10VDC or Pulsed Frequency (0/4-20mA available on special request)
Integration Inputs/Outputs	1 x RS-232 Serial Port (DB9)—ASCII command interface 2 x RS-485 (pluggable screw terminals)—BACnet MSTP 6 x Normally Open Contact Closures (pluggable screw terminals)—Programmable
Communication Network(s)	BACnet MSTP; Maximum 127 Devices per MSTP Segment; BACnet IP (-IP variants only); - enables connection of multiple MSTP Segments through IP infrastructure
Network Wiring (MSTP)	1 x Twisted Pair + Ground suitable for RS485 Communication; 1200m / 4000ft absolute max bus Length (limiting to 600m / 2000ft recommended)
Dimensions	160.00mm (6.30") x 97.00mm (3.82") x 30.00mm (1.18")
Enclosure	Custom Molded ABS Plastic Enclosure

## Ordering Information

Orderable Part Number	Description
CP-B	ControlPoint—MSTP Sensor / AV Interface
CP-IP-B	ControlPoint-IP—BACnet MSTP-IP Router with Sensor / AV Interface
CP-IP-B-BBMD	ControlPoint-BBMD—BACnet MSTP-IP Router with BBMD functionality and Sensor / AV Interface
PS-24V-1-US	24V 1A Power Supply (US plug) for ControlPoint