

Flexible 2-Motor BACnet MS/TP Controller

HARDWARE FEATURES

- Universal: 110-240VAC
- 2 Motor Outputs
- 6 Contact Closure Inputs
 - Simple-Switch™ default bindings for onboard/network motors
 - Flexible Control Groups
 - Network Mappable*
 - Configurable Responses including Scene Control
- Pluggable Switch and Network Connectors for Easy Installation
- Optional programming through network or on-board MicroUSB

*requires optional network

WORKS WITH...

- Roller Shades
- Venetian Blinds
- Louvers
- Rack Arm Systems
- Skylights
- Operable Windows
- And more...

NATIVE BACnet

- No gateway device required for BMS integration



Embedia's Solarai™ EB2v1 GROUP is a BACnet MS/TP device capable of independent or grouped control for up to two motorized systems. It is designed for response based automation and out-of-the-box low voltage control of roller shades, venetian blinds, operable louvers, and other devices using any standard 4-wire AC motor.

An optional BACnet MS/TP communication network, often not required for smaller installations, adds flexibility through additional programming and interface options. By implementing the same unique distributed intelligence architecture pioneered by Embedia's premium PLUS level controls. The GROUP controller is both scalable and reliable. The 2 and 4-Motor versions of the GROUP can be upgraded in the field to PLUS level functionality.

Each controller has 3 pairs of contact closure inputs with fully programmable, priority based, response profiles. Each input can be reconfigured to control any group of motors on the entire network (where available). A simple dry contact switch, or any other device capable of closing a contact, can be used for advanced group and scene control.

PRODUCT HIGHLIGHTS

- ▶ **OUT-OF-THE-BOX FUNCTIONALITY**
 - ✦ ZERO-CONFIG SIMPLE-SWITCH™ DEFAULTS
- 📱 **CONFIGURABLE WITH MOBILE APP (ADD-ON REQ'D)**
 - ⚙️ **SENSOR RESPONSE**
 - 📄 **PRIORITIES**
 - ⚙️ **EXTERNAL INPUTS / CONTROLS INTEGRATION**
- 🌐 **BACNET MS/TP INDUSTRY-STANDARD NETWORK**
- 📏 **SCALABLE (STANDALONE TO WHOLE BUILDING)**
- 🔧 **UPGRADEABLE FEATURES (IN-FIELD UPGRADES)**
- 🔌 **QUICK DISCONNECT (POWER AND MOTORS)**

By default, the onboard input pairs provide forward/reverse switch control for the attached motors as well as networked motors on Simple-Switch™ channels 1, 2, and MASTER:

Closing a contact momentarily will start the motors moving in the corresponding direction. Closing both contacts will stop the motors.



Holding a contact closed for more than 1.5 seconds will move the motors in the corresponding direction until the contact is released.



Technical Specifications

Parameter	Specification
Line Voltage Input	Universal 110-240 VAC at 50-60 Hz
Motor Outputs	2 Motor Output; 110-240 VAC (Matched to Line Voltage Input); Max. 2A (Up to 5A upon special request)
Low Voltage Inputs	6 Contact Closure Inputs (3 pairs);
Communication Network (optional)	BACnet MS/TP; Maximum 127 Devices per Segment; Expandable using BACnet/IP Routers such as ControlPoint MS/TP-IP
Network Wiring (optional)	1 x Twisted Pair + Ground suitable for RS485 Communication; 1200m / 4000ft absolute max bus Length (limiting to 600m / 2000ft recommended)
Dimensions	180.00mm (7.09") x 90.70mm (3.57") x 39.00mm (1.54")
Enclosure Options	Custom Plastic Enclosure (ABS)

SIMPLE-SWITCH™ DEFAULTS

SWITCH INPUT

	↑1	↑2	↑3	↑4	↑5
1	☑	☐	☑	N/A	N/A
2	☐	☑	☑	N/A	N/A
3	☑	☐	☑	N/A	N/A
4	☐	☑	☑	N/A	N/A

COMPANION PRODUCTS

SW7 (Simple-Switch™, multiple options)

- Push Button Switches
- Contact Closure, USB, or RF
- Standard "Decorator" Styling
- Custom Engraving Available

USB Addons

- USBIF-AV - serial integration
- USBIF-DC12 - dry contact inputs
- USBIF-RF-Z - RF (mesh) receiver for wireless switches
- USBIF-WiFi - WiFi network

ControlPoint

- Sensor Inputs
- AV/BMS Integration
- BACnet MS/TP-IP Router (optional)

Control Panel Software

- Graphical User Interface for Advanced system Management (network required)

Third-Party Devices/Switches

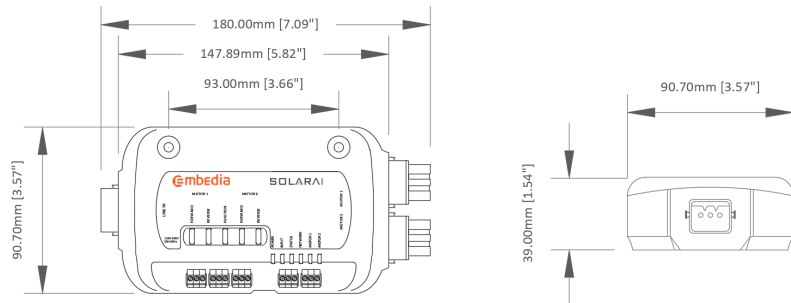
- Contact Closures
- Dry Contact Outputs
- Off-the-Shelf Switches
- A/V / BMS Outputs

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:

<http://www.embedia.com>



GROUP-M2-PC-B

PLUG-HIRSCHMANN-MALE

PLUG-HIRSCHMANN-FEMALE



Ordering Information

Orderable Part Number	Description
GROUP-M2-PC-B	EB2v1 GROUP—2 motor BACnet MS/TP controller in custom fit plastic enclosure
PLUG-HIRSCHMANN-MALE	Hirschmann Plug for Motors
PLUG-HIRSCHMANN-FEMALE	Hirschmann Plug for Power



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