

# Power Switch Module Datasheet

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## Overview

The Power Switch Module (CE-MD-005-0000) extends MachineMotion 2's functionality with an integrated solid-state relay, which lets you switch various AC-powered devices on and off.

This plug-and-play module requires just three connections: one to the MachineMotion 2 controller, one to an AC power outlet, and one to the device to control.

Compatible modules, including the Power Switch Module (CE-MD-004-0000), can also be daisy chained one after the other, making it possible to connect up to eight modules per MachineMotion 2 controller.

## Features

- Switch AC loads up to 15 A at 120 VAC or 10 A at 230 VAC.
- Support various loads with two types of output connectors: one NEMA 5-15R, and one, terminal block.
- Connect compatible modules via daisy chain.
- Configurable address.
- Plug-and-play to access from the Control Center, MachineLogic and Python API.

# Programming options

Program the Pushbutton Module using [MachineLogic] or the [Python API]. It can also be accessed from the Control Center.

## Technical Specifications

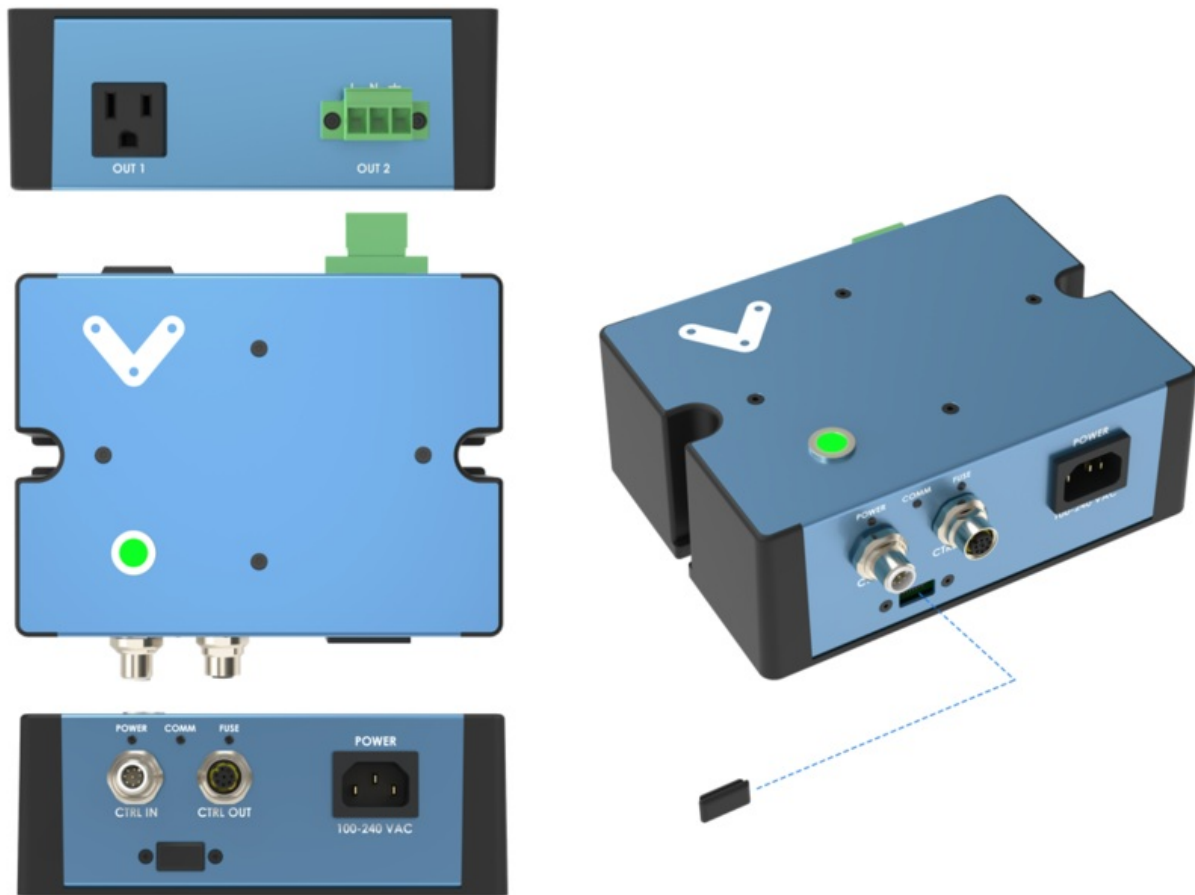


Figure 1: Power Switch Physical interface.

## General

Item	Specification
Part Number	CE-MD-005-0000
Certifications	<ul style="list-style-type: none"><li>• UL 60730-1</li><li>• CSA E60730-1</li><li>• EN 61000-6-2 (EMC Directive)</li><li>• EN 55011:2016 (EMC Directive)</li><li>• EN IEC 60730-1:2013 (Low Voltage Directive)</li><li>• EN IEC 63000:2016 (RoHS Directive)</li></ul>
Temperature Range	0 to 40°C
Max temperature rise from ambient at full load	32°C
Dimensions	66 x 178 x 133.0 mm

Item	Specification
Weight	0.95 kg
Material	<ul style="list-style-type: none"> <li>Bottom enclosure: ABS</li> <li>Top enclosure: Aluminum</li> </ul>
Max combined output current, <i>OUT1</i> + <i>OUT2</i>	15 A at 120 VAC, 10 A at 230 VAC
Max voltage drop, <i>POWER</i> to <i>OUT1/OUT2</i>	1.30 V

*POWER* Input Connector

Item	Specification
Type	IEC C14
Supply Voltage Range	100-240 VAC
Max supply current	15 A at 120 VAC, 10 A at 230 VAC

*CTRL IN* Male M12 connector pinout

Pin	Description
Pin 1	24 VDC (input)
Pin 2	Ground (input)
Pin 3	RS-485 A (input)
Pin 4	RS-485 B (input)
Pin 5	Reserved
Pin 6	Reserved
Pin 7	N/A
Pin 8	Reserved

*CTRL OUT* Female M12 connector pinout

Pin	Description
Pin 1	24 VDC (output)
Pin 2	Ground (output)
Pin 3	RS-485 A (output)

Pin	Description
Pin 4	RS-485 B (output)
Pin 5	Reserved
Pin 6	Reserved
Pin 7	N/A
Pin 8	Reserved

*OUT1* Output connector

Item	Specification
Type	NEMA 5-15R
Maximum Output Voltage	125 VAC
Maximum Output Current	15 A

*OUT2* Output connector

Item	Specification
Type	Terminal block, screw connections
Output Voltage Range	100-240 VAC
Maximum Output Current	15 A at 120 VAC, 10 A at 230 VAC
Conductor diameter	24 AWG to 10 AWG
Conductor stripping length	7 mm
Screw terminal torque	0.55 N·m ± 0.05 N·m

## Power Switch module address configurations

Below are the valid address configurations that can be used for the Power Switch module

### Valid address configurations

Switches								Module Address
Device ID				Device Type				
1	2	3	4	5	6	7	8	
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	Power Switch Module 1
ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	Power Switch Module 2
OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	Power Switch Module 3
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	Power Switch Module 4
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	Power Switch Module 5
ON	OFF	ON	OFF	OFF	ON	OFF	OFF	Power Switch Module 6
OFF	ON	ON	OFF	OFF	ON	OFF	OFF	Power Switch Module 7
ON	ON	ON	OFF	OFF	ON	OFF	OFF	Power Switch Module 8

*Table 1: Address configurations.*