

# Smart Pushbutton Module Datasheet

## Contents

[Overview](#)

[Features](#)

[Programming Options](#)

[Technical Specifications](#)

[General Specifications](#)

[Smart Pushbutton Module](#)

[Physical Interface](#)

[Pushbuttons \(black/white\)](#)

[CTRL IN Male M12 connector](#)

[pinout](#)

[CTRL OUT Female M12](#)

[connector pinout](#)

[Smart Pushbutton module](#)

[address configurations](#)

[Valid address configurations](#)



## Overview

The Pushbutton Module, CE-MD-004-0000, extends MachineMotion 2's functionality with two latching (alternate action) pushbuttons. This plug-and-play module only requires a single connection to the MachineMotion 2 controller. Compatible modules, such as the Power Switch (CE-MD-005-0000) & additional Pushbutton modules can also be daisy chained to each other, making it possible to connect up to eight modules per MachineMotion 2 controller.

## Features

- Includes two latching pushbuttons
- Connects (daisy chain) with compatible modules
- Configurable address
- Plug-and-play 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

### General Specifications

---

<b>Part Number</b>	CE-MD-004-0001
<b>Certifications</b>	<ul style="list-style-type: none"> <li>• EN 61000-6-2 (EMC Directive)</li> <li>• EN 55011:2016 (EMC Directive)</li> <li>• EN 63000:2016 (RoHS Directive)</li> </ul>
<b>Weight</b>	0.45 kg
<b>Dimensions</b>	46 x 88 x 133.0 mm
<b>Material</b>	<ul style="list-style-type: none"> <li>• Bottom enclosure: ABS</li> <li>• Top enclosure: Aluminum</li> </ul>
<b>Operating Temperature</b>	0 to 40°C
<b>Included in the Box</b>	<ul style="list-style-type: none"> <li>• 1x Pushbutton Module (CE-MD-004-0000)</li> <li>• 1x Control Device Extension Cable, 5m (CE-CA-022-5000)</li> <li>• 1x Module Termination Jumper (CE-JP-001-0001)</li> <li>• 2x M8 Drop-in Spring Loaded T-Nut (HW-FN-002-0001)</li> <li>• 2x M8 x 18mm Screw (HW-FN-003-0018)</li> </ul>

### Smart Pushbutton Module Physical Interface



*Figure 1: Physical interface.*

### Pushbuttons (black/white)

<b>Pushbutton type</b>	Latching (alternate action)
------------------------	-----------------------------

**Mechanical life (minimum)**

250,000 operations

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

## Smart Pushbutton module address configurations

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

### Valid address configurations

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

*Table 1: Address configurations.*