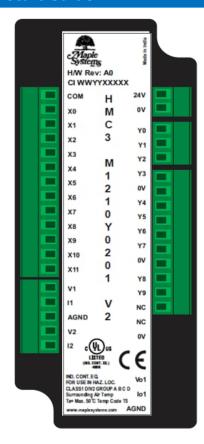
# HMC3-M1210Y0201-V2 Quick Start Guide



**HMC3-1210Y0201-V2:** 12 Bi-directional type inputs, 10 Digital outputs - 2 PNP type transistor outputs and 8 Relay type outputs. 2 Analog inputs (16-bit resolution) & 1 Analog output (12-bit resolution)

For more information, please refer to the MAPware-7000 Programming Manual, available in software help section and/or you can download from the Maple Systems website.



For More Information, visit <a href="https://www.maplesystems.com">https://www.maplesystems.com</a>

#### SPECIFICATIONS

SPECIFICATIONS				
Power Supply				
Voltage Rating	24VDC (±15%), 12V from base			
Power Rating	Input/channel: 24VDC, 5mA typical Output/Channel: 250mA @ 24VDC			
Isolation	Optical Isolation for all I/O points. High isolation voltage (BV= Greater than 1.5kV)			
Local I/O Specification				
Number of Inputs	12 Inputs Bi-directional Type			
Input Design	According to EN 61131-2 Type 1			
ON Voltage	Min.: 15VDC, Max.: 30VDC			
OFF Voltage	Min.: -3VDC, Max.: 5VDC			
Nominal Input Voltage	24VDC			
Nominal Input Current	5mA typical			
Input Response Time	ON: 10msec, OFF: 10msec			
Input Impedance	4.8kΩ			
Number of Outputs	2 PNP type transistor outputs and 8 Relay type outputs			
ON Output Voltage	Min ON: 22VDC, Max. ON: 30VDC (Voltage across load)			
OFF Output Voltage	Min OFF: 0.2VDC Max. OFF: 1VDC			
Nominal Output Voltage	30VDC			
Nominal Output Current	250mA type/channel			
Output Response Time	ON: 10msec, OFF: 10msec			
Nominal Load Max.	96Ω/6W (resistive) @ 24VDC 6VA (inductive, unity power factor)			
Analog I/O Specification				
Analog Input Total Channels	2 Input channels (16 bit resolution)			
Input Type	0-20mA, 4-20mA & 0-10VDC, 0-5VDC			
Analog Output Total Channels	1 Output channels (12 bit resolution)			
Output type	0-20mA, 4-20mA and 0-10VDC, 0-5VDC			
Accuracy	± 0.2% of full scale @ 25°C			

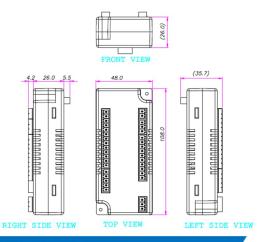
[Note: HMC3 I/O Module Series only compatible with HMC2000/HMC4000 Series Base Model]

## **SPECIFICATIONS**

Environment & Approvals		
Operating Temperature**	0 to 60°C	
Storage Temperature	-20 to 85°C	
Humidity	10 to 90% (Non-Condensing)	
Short Circuit Protection	Yes	
Product Dimensions	48mm x 108mm x 35.7mm (W x H x D)	
Approvals	CE, UL	

<sup>\*\*</sup> Operating temperature: For UL 0 to 50° C

#### **Dimension Details:**



# PANEL MOUNTING

## Mounting with base models:

With the expansions, while unpacking the unit, user will find two screws already attached with base bottom case. Fix the expansion with the HMI as shown below with these screws. Fix the Expansion connector with the expansion female connector given on base HMI. Apply torque 0.1Nm while fixing with base unit.

## Mounting with 4.3" base model:



## Mounting with 7" and 10.1" base model:

For 7" and 10.1" HMI models, the procedure of mounting expansions is same. Only instead of horizontal mounting, expansions will mount in vertical directions.

Hence, accordingly these bases are having facility to add 3 and 5 expansions at a time respectively.

#### Mounting with 7" base model:



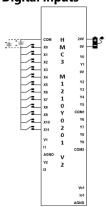
## Mounting with 10.1" base model:



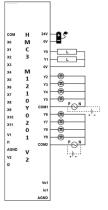
[Note: All Pictures shown are for illustration purpose only. Actual product size may vary.

## WIRING DIAGRAM

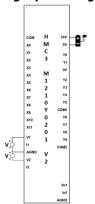
### **Digital Inputs**



## **Digital Output**



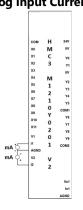
#### **Analog Input Voltage**



### **Analog Output Voltage**



**Analog Input Current** 



**Analog Output Current** 



#### **WARNING**

- This equipment is suitable for use in Class I, Division 2, Groups A, B, C and D or nonhazardous locations only.
- WARNING EXPLOSION HAZARD Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.
- WARNING EXPLOSION HAZARD Substitution of components may impair suitability for Class I, Division 2.
- The list of materials used in the construction of these devices with name of sealed device generic name of the material and the supplier's name and type designation.
- It is recommended that the user periodically inspect the sealed devices used, for any degradation of properties and replace the device if any degradation is found.

## **Technical Support:**

- For Technical support, please contact Maple Systems along with the unit serial number and revision number written on the address sticker of the unit.
- Also, provide information of the application used. Usually, including your application also provides a lot of help. If possible, e-mail the application to Maple Systems.

## **REVISION HISTORY**

Rev.	Description	Date
00	First Draft	10/17/2022

Maple Systems reserves the right to change or discontinue specifications and features without prior notice. To view the latest and updated datasheets/manuals please visit <a href="https://www.maplesystems.com">www.maplesystems.com</a>.