HMC3-M1210P0201-V2 Quick Start Guide

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HMC3-M1210P0201-V2: 12 Bi-directional type inputs, 10 PNP type transistor 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 <u>https://www.maplesystems.com</u>

SPECIFICATIONS

Voltage Rating24VDC (±15%), 12V from basePower RatingInput/channel: 24VDC, 5mA typical Output/Channel: 250mA @ 24VDCPower RatingOptical Isolation for all I/O points. High isolation voltage (BV= Greater than 1.5kV)IsolationIl I Input Sidicion voltage (BV= Greater than 1.5kV)Local I/O Specification12 Inputs Bi-directional TypeNumber of Inputs12 Inputs Bi-directional Type 1ON VoltageMin: 15VDC, Max: 30VDCOFF VoltageKacording to EN 61131-2 Type 1ON VoltageMin: -3VDC, Max: 30VDCNominal Input Voltage24VDCNominal Input VoltageON: 10msec, OFF: 10msecInput Response TimeON: 10msec, OFF: 10msecInput Impedance4.8kQOFF Output VoltageMin OFF: 0.2VDC, Max. ON: 30VDC (Voltage across load)OFF Output Voltage30VDCNominal Output CurrentStomA type/channelOutput Response TimeON: 10msec, OFF: 10msecNominal Output CurrentStomA type/channelOutput Response TimeON: 10msec, OFF: 10msecOutput Response TimeON: 10msec, OFF: 10msecNominal Output CurrentStomA type/channelOutput Response TimeON: 10msec, OFF: 10msecAnalog Input Total Channels21 Input channels (16 bit resolution)Dutput Response TimeON: 10msec, OFF: 10msecOutput Response TimeON: 10msec, OFF	Power Supply					
Power RatingOutput/Channel: 250mA @ 24VDCOptical Isolation for all I/O points. High isolation voltage (BV= Greater than 1.5kV)Local I/O SpecificationNumber of Inputs12 Inputs Bi-directional TypeInput DesignAccording to EN 61131-2 Type 1ON VoltageMin.: 15VDC, Max.: 30VDCOFF VoltageMin.: -3VDC, Max.: 5VDCNominal Input Voltage24VDCNominal Input Current5mA typicalInput Impedance4.8kΩNumber of Outputs10 PNP type transistor outputsON VoltageMin ON: 22VDC, Max. ON: 30VDC (Voltage across load)OFF Output Voltage30VDCNominal Output Voltage30VDCNominal Output Current250mA type/channelOutput Response TimeON: 10msec, OFF: 10msecInput Impedance4.8kΩNumber of Outputs00 PNP type transistor outputsON Output Voltage00VDCNominal Output Voltage30VDCNominal Output Tortal (inductive, unity power factor)Analog Input Total Channels21 Input channels (16 bit resolution)Input Type21 Input channels (16 bit resolution)	Voltage Rating	24VDC (±15%), 12V from base				
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Nominal Load Max. (inductive, unity power factor) Analog I/O Specification 2 Input channels (16 bit resolution) Analog Input Total Channels 0-20mA, 4-20mA &	Output Response Time	ON: 10msec, OFF: 10msec				
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Analog Input Total Channels 2 Input channels (16 bit resolution) 0-20mA, 4-20mA &	Nominal Load Max.	(inductive, unity power factor)				
Channels 0-20mA, 4-20mA &						
Input Type		2 Input channels (16 bit resolution)				
	Input Type					
Analog Output Total	Analog Output Total					
Channels Toutput channels (12 bit resolution)	Channels	1 Output channels (12 bit resolution)				
Output type 0-20mA, 4-20mA and 0-10VDC, 0-5VDC	Output type					
Accuracy ± 0.2% of full scale @ 25°C	Accuracy	± 0.2% of full scale @ 25°C				

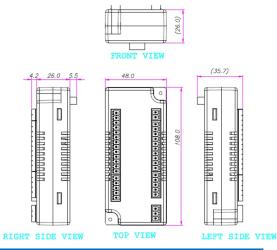
[Note: HMC3 I/O Module Series only compatible with HMC2000/HMC4000 Series Base Model]

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		

** 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:

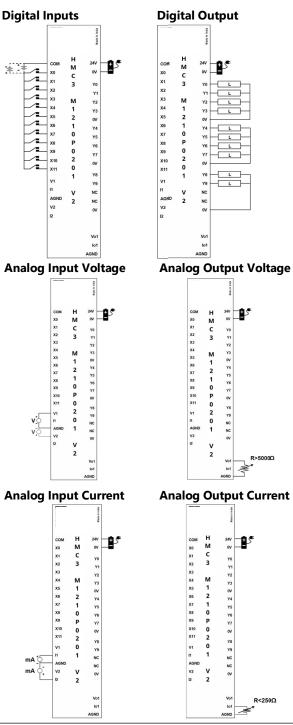


Mounting with 10.1" base model:



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

WIRING DIAGRAM



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 <u>www.maplesystems.com</u>.