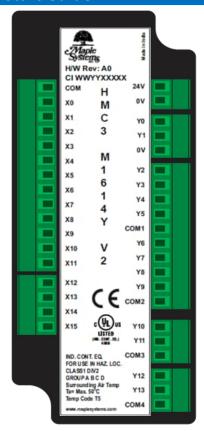
# HMC3-M1614Y-V2 Quick Start Guide



**HMC3-M1614Y-V2:** 16 Bi-directional type inputs, 14 Digital outputs - 2 PNP type transistor outputs and 12 Relay type outputs.

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**

| 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.<br>High isolation voltage (BV= Greater<br>than 1.5kV) |  |
| Local I/O Specification |   |  |
| Number of Inputs        | 16 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<br>and 12 Relay type outputs                                  |  |
| ON Output Voltage       | Min ON: 22VDC, Max. ON: 30VDC<br>(Voltage across load)                                      |  |
| OFF Output Voltage      | Min OFF: 0.2VDC<br>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)                              |  |
| Accuracy                | ± 0.2% of full scale @ 25°C   |  |

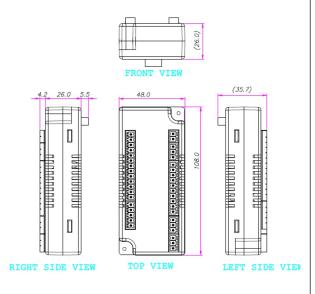
[Note: HMC3 I/O Module Series only compatible with HMC2000/ HMC4000 Series Base Model]

## **SPECIFICATIONS**

| Environment & Approvals     |                                      |  |
|-----------------------------|--------------------------------------|--|
| Operating Temperature**     | 0 to 60°C                            |  |
| Storage<br>Temperature      | -20 to 85°C                          |  |
| Humidity                    | 10 to 90% (Non-Condensing)           |  |
| Short Circuit<br>Protection | Yes                                  |  |
| Product<br>Dimensions       | 48mm x 108mm x 35.7mm<br>(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. Examples are shown here.

## Mounting with 7" base model:



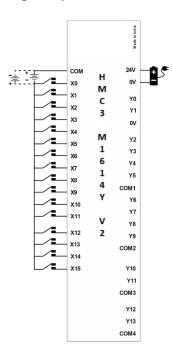
## Mounting with 10.1" base model:



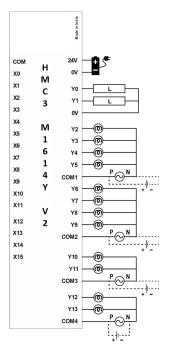
[Note: All Pictures shown are for illustration purpose only. Actual product size may vary.

#### **WIRING DIAGRAM**

#### **Digital Inputs**



## **Digital Output**



#### 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 | 10/18/2022 |

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

www.maplesystems.com.