

# TM2AMM6HT

analog input/output module M238 - 4 inputs  
voltage/current high level - 2 output



Product availability: Stock - Normally stocked in distribution facility  
Price\*: 483.00 USD



## Main

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Commercial Status         | Commercialised                                                          |
| Range of product          | Modicon M238 logic controller                                           |
| Product or component type | Input/Output analog module                                              |
| Analogue input number     | 4                                                                       |
| Input level               | High level                                                              |
| Analogue input type       | Voltage 0...10 V non differential<br>Current 4...20 mA non differential |
| Analogue output number    | 2                                                                       |
| Analogue output type      | Voltage 0...10 V<br>Current 4...20 mA                                   |
| Cross talk                | <= 2 LSB                                                                |

## Complementary

|                                 |                                                                                                                                                                        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range compatibility             | Advantys OTB<br>Twido                                                                                                                                                  |
| Analogue input resolution       | 12 bits                                                                                                                                                                |
| Analogue output resolution      | 12 bits                                                                                                                                                                |
| LSB value                       | 4 $\mu$ A current current<br>2.5 mV voltage voltage                                                                                                                    |
| Permissible continuous overload | 40 mA current<br>13 V voltage                                                                                                                                          |
| Input impedance                 | <= 250 MOhm current<br>>= 1 Ohm voltage                                                                                                                                |
| Load type                       | Resistive                                                                                                                                                              |
| Load impedance ohmic            | >= 2000 Ohm voltage<br><= 300 Ohm current                                                                                                                              |
| Stabilisation time              | 20 ms                                                                                                                                                                  |
| Conversion time                 | 20 ms + 1 controller cycle time                                                                                                                                        |
| Sampling duration               | <= 16 ms                                                                                                                                                               |
| Acquisition period              | 16 ms per channel + 1 controller cycle time                                                                                                                            |
| Measurement error               | +/- 0.9 % of full scale 4...20 mA 25 °C<br>+/- 0.9 % of full scale 0...10 V 25 °C<br>+/- 0.5 % of full scale 4...20 mA 25 °C<br>+/- 0.5 % of full scale 0...10 V 25 °C |
| Temperature coefficient         | +/-0.015 %FS/°C 4...20 mA 4...20 mA<br>+/-0.015 %FS/°C 0...10 V 0...10 V<br>+/- 0.02 %FS/°C 4...20 mA<br>+/- 0.02 %FS/°C 0...10 V                                      |
| Repeat accuracy                 | +/-0.5 %FS input<br>+/- 1 %FS output                                                                                                                                   |
| Non-linearity                   | +/- 0.5 %FS voltage<br>+/- 0.5 %FS current<br>+/- 0.4 %FS voltage<br>+/- 0.4 %FS current                                                                               |

|                                               |                                                                                                    |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------|
| Output error                                  | +/- 1 %FS                                                                                          |
| Output ripple                                 | <= 1 LSB                                                                                           |
| Total error                                   | +/-1 %FS voltage voltage<br>+/-1 %FS current current<br>+/- 1.5 %FS voltage<br>+/- 1.5 %FS current |
| Type of cable                                 | Shielded cable                                                                                     |
| Insulation between channel and internal logic | Photocoupler                                                                                       |
| Supply                                        | External supply                                                                                    |
| [Us] rated supply voltage                     | 24 V DC                                                                                            |
| Supply voltage limits                         | 19.2...30 V                                                                                        |
| Electrical connection                         | 1 removable screw terminal block                                                                   |
| Current consumption                           | 80 mA 24 V DC external<br>60 mA 5 V DC internal                                                    |
| Product weight                                | 0.19 lb(US) (0.085 kg)                                                                             |

## Environment

|                     |                                                                                                                                 |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Dielectric strength | 800 V between the I/O and internal logic<br>800 V between I/O channel<br>1500 V between the I/O and the external supply circuit |
| Width               | 0.93 in (23.5 mm)                                                                                                               |
| Depth               | 2.76 in (70 mm)                                                                                                                 |
| Height              | 3.54 in (90 mm)                                                                                                                 |

## Ordering and shipping details

|                       |                                                   |
|-----------------------|---------------------------------------------------|
| Category              | 22531 - PLCS, TWIDO, TWD                          |
| Discount Schedule     | PC12                                              |
| GTIN                  | 00785901645092                                    |
| Nbr. of units in pkg. | 1                                                 |
| Package weight(Lbs)   | 0.38                                              |
| Product availability  | Stock - Normally stocked in distribution facility |
| Returnability         | Y                                                 |
| Country of origin     | FR                                                |

## Offer Sustainability

|                                  |                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                                 |
| RoHS                             | Compliant - since 0910 - <a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold                                     |
| Product environmental profile    | Available <a href="#">Download Product Environmental</a>                              |
| Product end of life instructions | Available <a href="#">Download End Of Life Manual</a>                                 |

## Contractual warranty

|        |           |
|--------|-----------|
| Period | 18 months |
|--------|-----------|