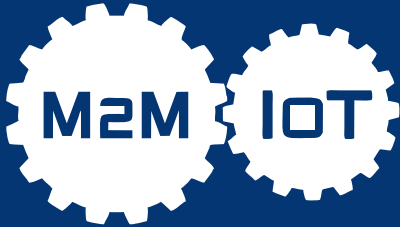


# GENESYS



## ISOLATED RS-485 MODULE

ISOLATED RS-485 MODULE with CAN  
BUS and USB OPTIONS

Product Code: GBI-MC-202

**GENESYS**  
ELECTRONICS DESIGN

**CALL US ON +61 2 9496 8900**

Unit 5, 33 Ryde Road  
Pymble NSW 2073 Australia  
[enquiries@genesysdesign.com.au](mailto:enquiries@genesysdesign.com.au)

## ISOLATED RS-485 MODULE

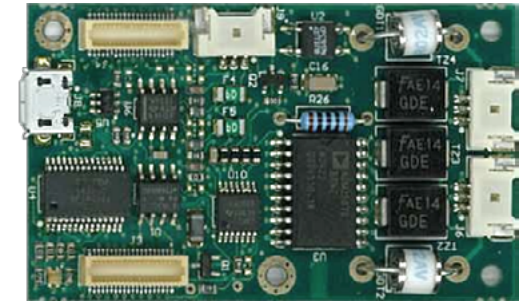
The Genesys Isolated RS-485 module is a highly robust communications interfacing solution designed to “take a hit” and survive. The RS-485 connections include large-sized transient absorbers and spark-gaps in a multi-staged protection network within the isolated region of the circuit board. The module also includes a number of other communications interfaces (e.g. CAN) making the module a versatile communications solution.

### AIR-GAPPED CONNECTIVITY

As an isolated interface, the RS-485 connection offers complete galvanic isolation from the receiver while still providing superb performance and seamless connectivity. With in-built current limiting, thermal and short circuit protection measures, the Genesys Modular Stack Isolated RS-485 Module is the perfect solution for out-door and industrial monitoring and control environments.

### A LITTLE BIT MORE

Designed for flexibility, the module also comes with a micro USB and CAN serial interface for the GMS stack, allowing for greater ease and simplification of complex system engineering.



### CHARACTERISTICS OVERVIEW

#### RS-485 INTERFACE

Up to 500kbps

Isolation voltage 2.5kVrms

#### DIMENSIONS

57mm x 34mm

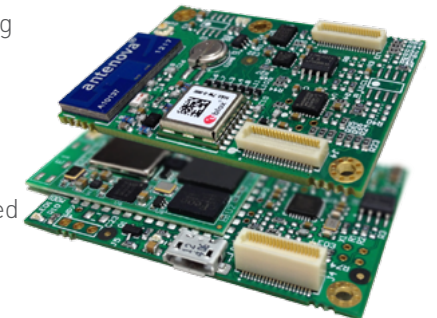


#### CONNECTIVITY

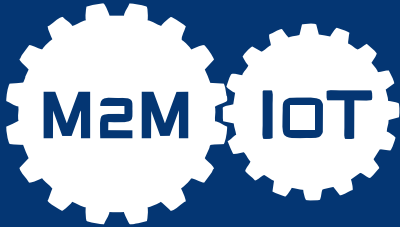
Genesys Modular Stack dual 40-pin connector



Genesys Modular Stack is a technology allowing for the easy interconnection of expansion modules. Genesys Modular Stack compliant modules feature a characteristic pair of board-to-board feedthrough connectors, so that they are infinitely stackable with each module adding new functionality. The Isolated RS-485 Module is fully Genesys Modular Stack compatible.



# GENESYS



## ISOLATED RS-485 MODULE

ISOLATED RS-485 MODULE with CAN BUS and USB OPTIONS

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## CHARACTERISTICS

### RS-485 SPECIFICATIONS

- Isolation voltage 2.5kVrms
- 500kbps

### I/O INTERFACES

- CAN bus (1Mbps)
- Genesys Modular Stack dual 40-pin connector:
  - 3V3 Power
  - 1 UART
  - Serial Peripheral Interface (SPI)
  - Inter-Integrated Circuit (I<sup>2</sup>C)
  - General Purpose Input/Output

### USB

- USB micro A/B Device Port

### MEMORY

- 2kb Serial EEPROM with Factory-Programmed EUI-48™ Address and Embedded Unique 128-bit Serial Number

### PHYSICAL

- Dimensions: 73mm x 34mm

### ENVIRONMENTAL

- Temperature (operating): -15°C to +55°C
- Temperature (survival): -55°C to +85°C
- Humidity (operating): 95% RH at 50°C

### POWER

- 3V3 Switched Rail (ON/OFF capability)
- 145mA @3V3 (Standby with all LEDs on)
- <145mA @3V3 (Sleep with all LEDs on)
- <125mA @3V3 (LEDs off)
- <13mA @3V3 (3V3 Switch Rail off with RS485 and CAN off, LEDs on)
- <3mA @3V3 (LEDs off)

### MOUNTING DIMENSION DRAWING

