The Genesys LTE Cat M1/NB1 Cellular Data Module adds low powered wide area network communication to Genesys Modular Stack compatible equipment.

A NEW WAY TO COMMUNICATE VIA LTE NETWORKS.
Genesys M2M devices can now make optimal use of existing LTE networks to communicate small amounts of data with ultra low power. Perfectly suited for low cost M2M applications requiring long battery life. Insert a Telstra mini-SIM with an associated data plan*.

EXTEND YOUR M2M NETWORK TO THE FARTHER REACHES.
The Genesys LTE Cat M1/NB1 Cellular Data Module will allow you to extend your M2M network further than ever before. Take advantage of LTE Cat M1/NB1 to increase the number of devices in your network while delivering reliable coverage† in harder to penetrate places! Ideal for indoor, remote and mobile IoT applications.

*Guaranteed to work in regions with LTE Cat M1/NB1 networks supporting 700/800/850/900/1800/1900/2100 MHz bands and a corresponding SIM card. A mobile plan supporting data is required for functionality. The LTE Cat M1/NB1 Cellular Data Module supports data-only SIM if SMS is not required.

†NB1 coverage where available. Please check the network provider’s rollout.

LTE CAT M1/NB1 CELLULAR DATA MODULE

CHARACTERISTICS OVERVIEW
SIM SUPPORT
Telstra and overseas mini-SIM cards supporting LTE bands: 700/800/850/900/1700/1800/1900/2100 MHz.

DIMENSIONS
73mm x 34mm

CONNECTIVITY
Genesys Modular Stack dual 40-pin connector
Optional Voice Accessory Board

Genesys Modular Stack allows for easy interconnection of expansion modules. Genesys Modular Stack compliant modules feature a characteristic pair of board-to-board feedthrough connectors ensuring that they are infinitely stackable with each module adding new functionality. The Keyfob Base Board is fully compatible with Genesys Modular Stack.
LTE CAT-M1/NB1 SPECIFICATIONS

- Worldwide Network Support - LTE bands:
  700/800/850/900/1700/1800/1900/2100 MHz
- Maximum downlink data rate:
  - M1 375 Kb/s
  - NB1 27.2 Kb/s
- Maximum uplink data rate:
  - M1 375 Kb/s
  - NB1 62.5 Kb/s

I/O INTERFACES

- mini-SIM (2FF) slot
- Genesys Modular Stack dual 40-pin connector:
  - 3V3 Power
  - 1 UART
  - Serial Peripheral Interface (SPI)
  - Inter-Intergrated Circuit (I2C)
  - 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

- Genesys Modular Stack 3V3 Power Load:
  - <20μA (Static)
  - <10mA (Dynamic)
- Auxiliary Radio Power:
  - 60mA (Active Connection, 12V input)
  - 0.25mA (Idle Connection, 12V input)
  - <10μA (Sleep/Hibernate, 12V input)

MOUNTING DIMENSION DRAWING