

GENESYS



TRANSCEIVER MODULE

6LoWPAN TRANSCEIVER MODULE
with 1mW TRANSMITTER

Product Code: GBI-ML-200

GENESYS
ELECTRONICS DESIGN

CALL US ON +61 2 9496 8900

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6LoWPAN TRANSCEIVER MODULE

The Genesys 6LoWPAN Transceiver Module is a modular, integrated wireless communications solution for creating productive Personal Area Networks.

AN INTELLIGENT RADIO

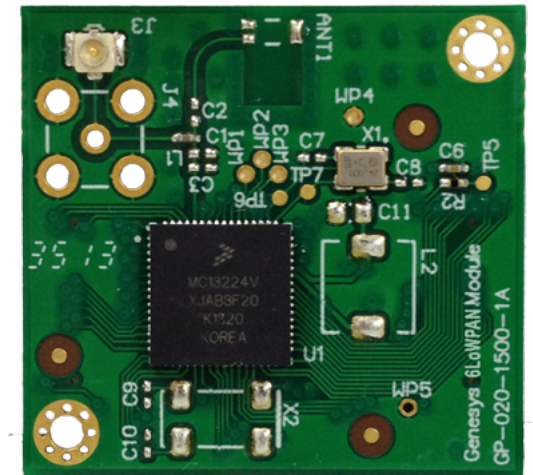
The 6LoWPAN Transceiver Module houses a powerful 32-bit ARM7-based microprocessor featuring 128KB of serial flash memory, 96KB of RAM and an integrated 1mW IEEE 802.15.4 compatible radio with a 1mW transmitter.

POWERFUL I/O CAPABILITIES

The 6LoWPAN Transceiver Module contains up to 64 programmable GPIOs bringing you an unprecedented level of user-configurable M2M wireless control.

FULL GENESYS M2M IoT COMPATIBILITY

The 6LoWPAN Transceiver Module serves as the professional level transceiver module in Genesys M2M equipment. M2M integration is seamless - all similarly configured 6LoWPAN transceivers within meshing nodes, M2M network servers and Gateway/Routers will instantly see another as a new addition to the network. 6LoWPAN sub-network separation can be achieved via the designation of a unique network ID.



CHARACTERISTICS OVERVIEW

CPU & MEMORY

26MHz 32-bit ARM7 CPU with 96KB RAM

DIMENSIONS

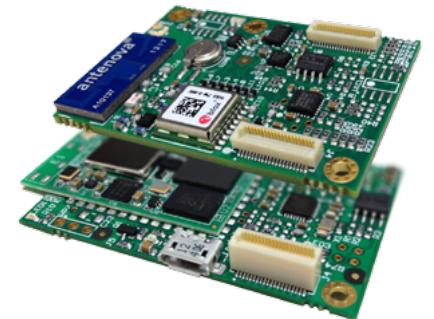
32mm x 34mm

CONNECTIVITY

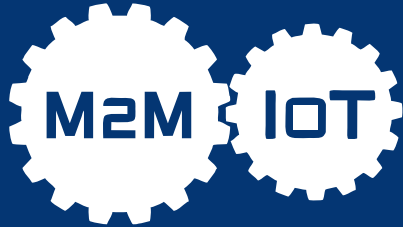
Genesys Modular Stack dual 40-pin connector
UFL and SMA radio antenna connector



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.



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CHARACTERISTICS

WIRELESS NETWORK

- IEEE 802.15.4 full mesh network
- Maximum Data Transfer Rate: 250kbps
- 6LoWPAN IPv6 enabled stack
- Supports drop-in, drop-out PnP

PROCESSOR SPECIFICATIONS

- CPU: 26MHz 32-bit ARM7
- Memory: 96 KB RAM, 128 KB Flash

RADIO SPECIFICATIONS

- IEEE 802.15.4 compliant MAC
- Transmit Power: +4dBm
- Receiver Sensitivity: -96dBm
- Antenna attachment via UFL connection, with on-board chip antenna and SMA connector options

I/O INTERFACES

- Genesys Modular Stack Dual 40-pin Connector:
 - 3V3 Power
 - 2 UARTs
 - Serial Peripheral Interface (SPI)
 - Inter-Integrated Circuit (I²C)
 - 6 Analogue/Digital Converters
 - Keyboard Interface
 - Timer/Counter IO
 - General Purpose Input/Outputs
 - JTAG Programmer



PHYSICAL

- Dimensions: 32mm 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 CONSUMPTION

- Genesys Modular Stack 3V3 Power Load:
 - 31mA (Radio TX Active)
 - 27mA (Radio RX Active)
 - <1mA (Idle)
 - ~70µA (Dozing)
 - 4.9µA (Hibernating)

MOUNTING DIMENSION DRAWING

