

GENESYS



TRANSCEIVER MODULE PRO

6LoWPAN TRANSCEIVER
MODULE with POWERFUL 100mW
TRANSMITTER

Product Code: GBI-ML-200P

GENESYS
ELECTRONICS DESIGN

CALL US ON +61 2 9496 8900

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6LoWPAN TRANSCEIVER MODULE PRO

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

AN INTELLIGENT RADIO

The 6LoWPAN Transceiver Module Pro houses a powerful 32-bit ARM7-based microprocessor featuring 128KB of serial flash memory, 96KB of RAM, an integrated IEEE 802.15.4 compatible radio and a powerful 100mW transmitter. The module is shielded to maximise radio performance.

MORE POWER FOR DEMANDING USERS

The Pro edition expands on the 6LoWPAN Transceiver Module's (GBI-ML-200) transmission capabilities by including an upgraded 100 mW transmitter and RF shielding to reduce interference and maximise performance.

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

34mm x 40mm

CONNECTIVITY

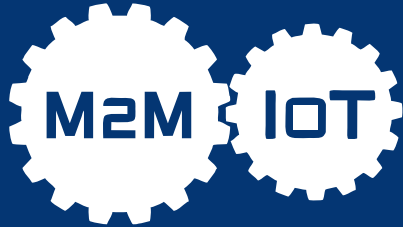
Genesys Modular Stack dual 40-pin connector
MMCX radio antenna connector



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
- 6LoWPAN IPv6 enabled stack
- Supports drop-in, drop-out PnP

PROCESSOR SPECIFICATIONS

- CPU: 26MHz 32-bit ARM7
- Memory: 96 KB RAM, 128 KB Flash
- 2kb Serial EEPROM Factory-Programmed EUI-48™ Address
- Embedded Unique 128-bit Serial Number

RADIO SPECIFICATIONS

- IEEE 802.15.4 compliant MAC
- Transmit Power +17dBm
- Receiver Sensitivity -96dBm
- Antenna attachment via MMCX radio antenna connector

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: 34mm x 40mm

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:
 - 124mA (Radio TX Active)
 - 27mA (Radio RX Active)
 - <1mA (Idle)
 - ~70µA (Dozing)
 - 4.9µA (Hibernating)

MOUNTING DIMENSION DRAWING

