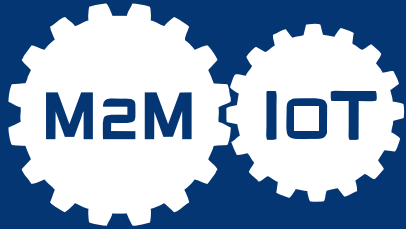


GENESYS



SENSOR I/O NODE PRO

6LoWPAN SPATIAL SENSOR and I/O
NODE with DIGITAL and ANALOGUE
I/O, GPS, ACCELEROMETER and
ENVIRONMENTAL SENSING

Product Code: GEN-AM-202P

GENESYS
ELECTRONICS DESIGN

CALL US ON +61 2 9496 8900

Unit 5, 33 Ryde Road
Pymble NSW 2073 Australia
enquiries@genesysdesign.com.au

6LoWPAN SPATIAL SENSOR I/O NODE PRO

The 6LoWPAN Spatial Sensor I/O Node Pro is a fully-featured M2M node, giving you the flexibility to control your device and monitor its surroundings including its physical location.

TAKE EVEN MORE CONTROL

The Spatial Sensor I/O Node Pro is pre-fitted with a Genesys Modular Stack module (GBI-MS-200) capable of GNSS (GPS, GLONASS, Galileo and others) location fixing and a 9-axis accelerometer. It also features temperature and humidity sensing capability, unlocking new possibilities such as controlling connected devices based on current weather conditions.

HUGE RANGE OF IO POSSIBILITIES

The Spatial Sensor I/O Node Pro can be configured to handle a broad spectrum of I/O and is constantly progressing with development of the Genesys Modular Stack. A range of applications is possible, including purely sensing (e.g. environmental or process monitoring) through to active control points and everything in between (such as localised stand-alone control loops). These are all configurable with the Genesys M2M common data abstraction model.

CUSTOM IO OPTIONS

Application-specific base-boards for the 6LoWPAN Sensor I/O Node are available to Genesys customers. Customised base-boards allow for optimisation of exposed I/O and overall form factor.

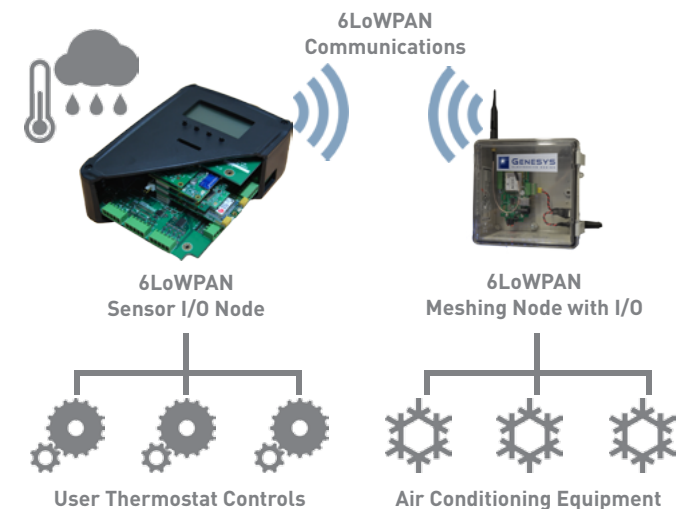
USER INTERFACE

Coupled with an optional user interface board (GBU-XN-200) with LCD screen, alpha-numeric keypad and context-sensitive buttons and LEDs, you can enjoy on-device monitoring of spatial and environmental data, in addition to display your M2M application status.

GENESYS
MODULAR
STACK

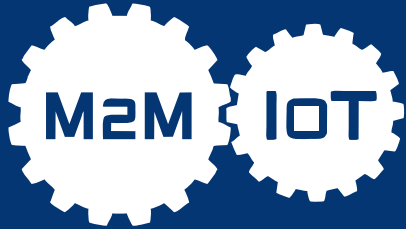


The 6LoWPAN Spatial Sensor I/O Node Pro comes equipped with Genesys Modular Stack technology, allowing it to seamlessly integrate with all supported modules, including 3G/4G connectivity and Wi-Fi. Modules add functionality just by stacking on top of each other.



APPLICATION EXAMPLE

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CHARACTERISTICS

WIRELESS NETWORK

- IEEE 802.15.4 full mesh network
- 6LoWPAN IPv6 enabled stack
- Supports drop-in, drop-out PnP

INTERNET CONNECTIVITY

- Multiple transparent RS-485/422 connections between subnets via Internet
- Access and control of network from PCs or mobile devices via internet
- Modbus TCP enabled

RS-485/422

- Dual transparent RS-485/422 to RS-485/422 data piping with full or half duplex capabilities
- Looping connector for multi-drop applications
- Power feed over RS-485 cable
- MODBUS RS-485/422 Master

I/O

- 4 A/D input channels 0 to 3V3
- 2 D/A output channels 0 to 3V3
- 2 Solid State Relay outputs 30V 1.2A
- Up to 9 GPIO lines 0 to 3V3
- I2C and SPI ports 0 to 3V3
- Supply Output (200mA)
- 3V3 Output (200mA)

USB

- USB serial port for PC or modem interface

STORAGE

- Dual on-board data backup EEPROMs
- EUI-48 48-bit Extended Unique Identifier

USER INTERFACE

- 2 Dual TX/RX indicator LEDs
- Dual status indicator LEDs
- Two pushbuttons & Reset button
- Remote monitoring and control via mobile app
- Optional accessory board (GBU-XN-200) with 128x64 monochrome back-lit LCD, 4 user LEDs and 4 user pushbuttons or a 4x4 keypad

PHYSICAL

- Dimensions: 110 (W) by 150 (H) by 50 (D) mm
- Weight: 350g

ENVIRONMENTAL

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

POWER SOURCES

- Supply Voltage - 5VDC to 9VDC
- Power Consumption (Operating) - 500 mW
- Power Consumption (Standby) - 50 mW

OTHER INTERFACES

- u.Blox MAX-7W GNSS Module
- 9-axis Accelerometer
- Humidity Sensor
- Temperature Sensor

