

M2M

GENESYS



SOLUTIONS CATALOGUE

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# WHAT IS M2M?

## CATALOGUE

The Machine-to-Machine (M2M) philosophy is to abstract and genericise inputs and outputs of systems and devices so that they may interact with each other as a cohesive system without human intervention.

M2M-connected devices rely on one or more central points of interconnect; in turn allowing brand new applications to be built up from existing modules without extensive software development.

**“M2M is... the interconnection and interoperability of disparate systems, sub-systems, networks & sub-networks”**

- Genesys M2M philosophy

Genesys' next-generation M2M platform will not only enable your systems to communicate with each other in ways you've never imagined, but also to join the **Internet of Things (IoT)**. What this means for consumers is the flexibility to monitor and control systems via the web, and to open up new possibilities for installing systems anywhere in the world, all seamlessly communicating as if they were in the same room.

## WHAT CAN M2M DO FOR YOU?

The only limit to the applications M2M technology can serve is imagination. Take a look at the following use cases for Genesys M2M.



### ASSET MANAGEMENT

Automate management of your company fleet by remotely controlling access, monitoring location and scheduling services based on vehicle diagnostics.



### PROCESS CONTROL & MONITORING

Increase productivity by controlling processes based on real-time sensor activity, including machine operating status, temperature and humidity conditions.



### SMART ENERGY

Monitor energy usage and reduce electricity bills by shedding heavy loads when not in use. Introduce renewable energy seamlessly with load balancing.



### SECURITY

Receive text alerts and video feeds in the event of a trigger, and minimise false alarms by visually determining the threat before notifying authorities.



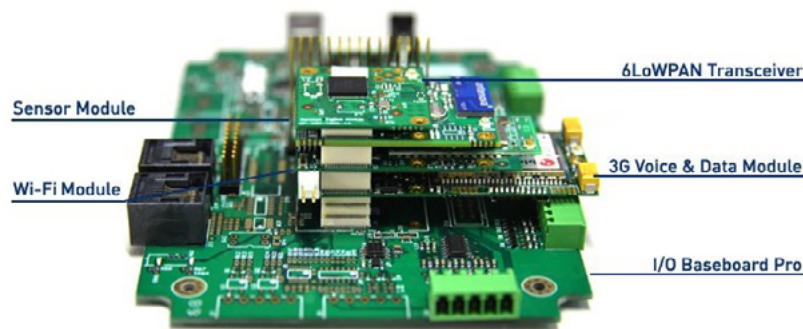
### HEALTH & SAFETY

Reduce hospital load by monitoring patients' health from home, track dementia sufferers with GPS, or set up geo-fencing to keep people away from risky areas.

GMS - Genesys Modular Stack is our new technology allowing for the easy interconnection of expansion modules. It is built onto baseboards of all of our M2M equipment, which allows functionality to be added to the baseboards simply by stacking modules on top of each other.

## WHY GENESYS MODULAR STACK?

Genesys Modular Stack technology has limitless advantages for our M2M IoT consumers and integrators. By using Genesys Modular Stack, upgradeability is seamless as all new functionality is self-contained within the module. Genesys is continually developing new Genesys Modular Stack modules that will bring swathes of new functionality, such as Wi-Fi, 4G LTE communications, Bluetooth® LE and various sensors to your existing M2M equipment.

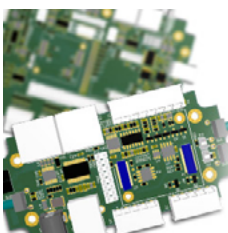


## HOW DOES GENESYS MODULAR STACK WORK?

A Genesys Modular Stack compatible baseboard found in equipment such as Meshing Nodes, features a characteristic pair of 40-pin sockets. Any expansion module marked as compatible with Genesys Modular Stack can then clip right into the baseboard, seamlessly adding functionality such as a new network protocol or sensing ability. Most Genesys Modular Stack compatible modules are equipped with feed-through connectors on the top side, allowing additional modules to be connected.



Baseboards act as Genesys Modular Stack hosts. Baseboards may be found in M2M equipment such as Meshing Nodes, and feature a characteristic pair of 40-pin sockets ready to accept modules. Baseboards may be chosen from our existing selection or alternatively can be custom designed if you have specific needs.



Modules are the heart of any Genesys Modular Stack application. When combined with equipment such as the Meshing Node, modules can turn a simple I/O capable node into one with 3G/4G wireless connectivity, Wi-Fi, Bluetooth LE, temperature and humidity sensing, positioning and location sensing and almost any application you can think of.

# M2M SOLUTIONS

## SYSTEM CASE STUDIES

Genesys offers complete and customisable system packages for internet-enabling your workplace. Customised systems can be developed upon request.

### BUILDING MANAGEMENT SYSTEM



GSS-GM-201

### OFFICE MONITORING & AUTOMATION SYSTEM



GSS-GM-202

### ELEVATOR MONITORING SYSTEM



GSS-GM-203

## NETWORK SERVER

Network Servers are the central hub of any M2M Installation. The server connects devices to the internet allowing remote monitoring and control.

### M2M IOT NETWORK SERVER



GEH-AM-200

### M2M NETWORK FLOOR CONTROLLER



GEH-AM-201

### M2M IOT NETWORK PROCESSORS



GEP-PM-200P/201P/202P

## NODES

Nodes are preconfigured devices made to meet common M2M/IoT applications. Nodes have 6LoWPAN networking readily available, allowing complex networks to be created without the need for wiring.

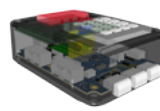
Furthermore, nodes are GMS enabled allowing them to be customised to any application.

### 6LOWPAN GATEWAY/ROUTER



GEG-AM-200

### 6LOWPAN GATEWAY/ROUTER PRO



GEG-AM-200P

### 6LOWPAN MESHING NODE



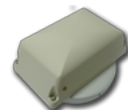
GEN-AM-201

### 6LOWPAN MESHING NODE PRO



GEN-AM-201P

### 6LOWPAN SPATIAL SENSOR I/O NODE



GEN-AM-202

### 6LOWPAN SPATIAL SENSOR I/O NODE PRO



GEN-AM-202P

### KEYFOB NODE PRO



GBI-BA-200P

### KEYFOB NODE

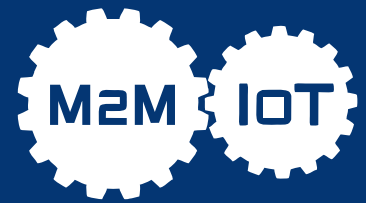


GBI-BA-200

### KEYFOB NODE ULTRA



GBI-BA-200U



# CATALOGUE

## MODULES

Customise any Genesys M2M Solution with GMS (Genesys Modular Stack) technology. Each module adds new functionality of a system, allowing it to expand to meet future needs.

### 6LOWPAN TRANSCIVER



GBI-ML-200

### SPATIAL SENSOR MODULE



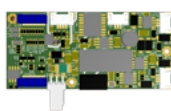
GBI-MS-200

### 6LOWPAN TRANSCIVER PRO



GBI-ML-200P

### ISOLATED 4-20MA LOOP MODULE



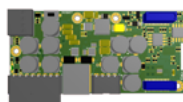
GBI-MS-201

### WIFI MODULE



GBI-MC-200

### MULTI-CHEMISTRY WIDE INPUT CHARGER MODULE



GBW-MH-201

### 3G VOICE & DATA MODULE



GBI-MC-201

### LITHIUM BATTERY PROTECTION BOARD



GBW-XN-200

### ISOLATED RS485 MODULE



GBI-MC-202

### SOLAR CHARGER MODULE



GBW-MH-200

### BLUETOOTH LE MODULE



GBI-MC-203

## BASEBOARDS

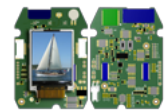
Baseboards are generic boards used in conjunction with GMS modules to provide a customised solution to any M2M/IoT application. Genesys baseboards are a proven technology, reducing development time and cost.

### I/O BASEBOARD



GBI-BG-200

### SENSOR BASE BOARD ULTRA



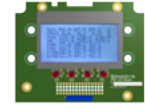
GBI-BS-200P

### I/O BASEBOARD PRO



GBI-BG-200P

### GUI ACCESSORY BOARD



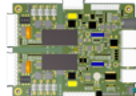
GBU-XN-200

### EMBEDDED PROCESSOR PRO



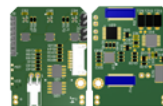
GBY-BY-200P

### ISOLATED 4-20MA LOOP BASE BOARD



GBI-BS-201

### SENSOR BASE BOARD



GBI-BS-200

## TOOLS

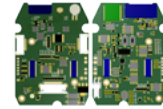
Genesys's Viztool Web and Android™ applications allow you to connect to your local Network Server or Cloud Server, giving you access to all settings.

### VISUALISATION TOOL FOR WEB



GTU-SM-200

### SENSOR BASE BOARD PRO



GBI-BS-200P

### VISUALISATION TOOL FOR ANDROID



GTU-AM-200

## GENESYS M2M IoT COMPONENTS

Genesys M2M IoT installations are completely scalable, and our technology is modular right down to the circuit board level, so that our customers only purchase the components their system needs. Take a look at the series of physical components that make up a Genesys M2M IoT system:



### NETWORK SERVER

**GEH-AM-200**

The central hub of your M2M installation, the Network Server aggregates data from all of your devices (via 6LoWPAN, Ethernet, Wi-Fi or RS-485) and allows them to interoperate with either themselves; or other locally or remotely connected devices. It also transforms your devices into Internet of Things (IoT) capable devices - connecting to the internet via 3G, Wi-Fi or Ethernet. For an additional layer of security and speed, Genesys' Cloud Server keeps rolling backups of your M2M settings.



### VISUALISATION TOOLS

**GTU-SM-200/GTU-AM-200**

Genesys Viztools are powerful yet easy-to-use Web and Android™ based applications which connect to your local Network Server or Cloud Server, giving you access to all settings. Both the Web app and Android app are capable of showing real-time graphical information to make it easy to determine the status of your system at any time. Additionally, all historical logging data is readily available.



### 6LoWPAN NETWORKING

**REFER CATALOGUE**

6LoWPAN Gateway/Routers provide either a primary interface into a 6LoWPAN network, or when used in tandem can also facilitate transparent tunnelling of industry standard RS-485 protocols over the IEEE 802.15.4 meshed wireless M2M network. 6LoWPAN Nodes of various sizes and capabilities form the grass-roots of a 6LoWPAN M2M network. The most basic node simply repeats wireless signals throughout your installation to increase the range. More advanced units contain auxiliary protocol connectivity, sensor modules and I/O modules, for example providing location and climate sensing. All nodes are Genesys Modular Stack compatible, allowing for easy upgradeability and extendability.

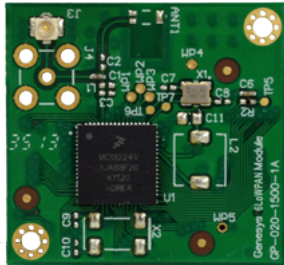


### GENESYS MODULAR STACK

**REFER CATALOGUE**

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.





## 6LoWPAN TRANSCEIVER

**GBI-ML-200**

The Genesys 6LoWPAN Transceiver Module provides an IEEE 802.15.4 compatible foundation for your Personal Area Network (PAN). It features a powerful 32-bit ARM7-based microprocessor featuring 128KB of serial flash memory, 96KB of RAM and an integrated 1 mW IEEE 802.15.4 compatible transmitter. The 6LoWPAN Transceiver Module contains up to 64 programmable GPIOs, bringing you an unprecedented level of wireless control.



## 6LoWPAN TRANSCEIVER PRO

**GBI-ML-200P**

The Genesys 6LoWPAN Transceiver Module provides an IEEE 802.15.4 compatible foundation for your Personal Area Network (PAN). It features a powerful 32-bit ARM7-based microprocessor featuring 128KB of serial flash memory, 96KB of RAM and a powerful integrated 100 mW IEEE 802.15.4 compatible transmitter, with RF shielding to keep interference to a minimum.



## WIFI MODULE

**GBI-MC-200**

The Genesys WiFi Module provides a powerhouse of wireless connectivity to any existing Genesys Modular Stack solution. It comes with an IEEE 802.11b/g/n transceiver as well as a full package of RFC-compliant network, transport and application layer protocols implemented in firmware. Any Genesys Modular Stack solution fitted with the WiFi module acquires fast, robust and easily integrated wireless connectivity.



## 3G VOICE & DATA MODULE

**GBI-MC-201**

The Genesys 3G Voice and Data Module adds wide area network and voice communications, worldwide, to Genesys Modular Stack compatible equipment, using supported SIM cards and when in range of a network.

Please ensure that your network supports UMTS bands 800/850/900/1700/1900/2100MHz. The 3G Voice and Data Module has been tested on Australian Telstra, Optus and Vodafone networks.

## ISOLATED RS485 MODULE

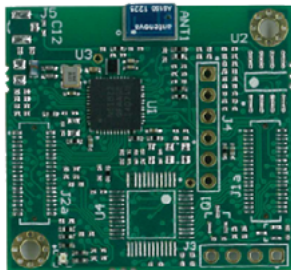
**GBI-MC-202**



The Genesys Isolated RS-485 module is a highly robust communications interfacing solution designed for survivability. 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.

## BLUETOOTH LE MODULE

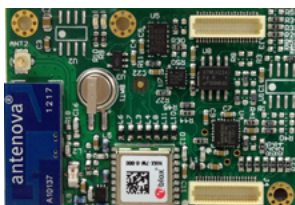
**GBI-MC-203**



The Genesys Bluetooth Low Energy Module is a modular, integrated wireless communications solution for creating low power Personal Area Networks. The Bluetooth LE Module provides qualified Bluetooth communication and can be used as a low-cost, low-power bridge between Smartphones and Tablets in Genesys M2M equipment.

## SPATIAL SENSOR MODULE

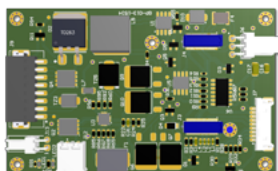
**GBI-MS-200**



The Genesys Sensor Module is an all-in-one unit for providing environmental and spatial sensing capabilities to Genesys Modular Stack compatible equipment. The Sensor Module contains a German engineered u.Blox multi-GNSS module in addition to an on-board backup battery, antenna and LNA. The Sensor Module also houses a 9-axis accelerometer providing additional accuracy to its positioning functionality.

## ISOLATED 4-20mA LOOP MODULE

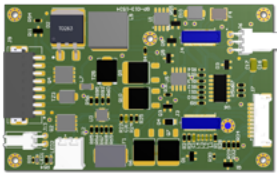
**GBI-MS-201**



The Genesys Isolated 4-20mA Loop Module is a highly-integrated solution for enabling any GMS compatible system to monitor current loop instrumentation. Each unit comes with two 4-20mA current loop channels (which is configurable for 0-20mA, 0-10V, 1-10V, 0-50V and 1-50V inputs via fitting options), one voltage signalling channel and an isoSPI channel.

The isoSPI interface is suitable for communicating with remote SPI devices (up to 100m cable lengths supported) and has the added benefit of electrical isolation.

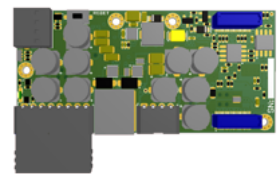




## SOLAR CHARGER MODULE

**GBW-MH-200**

The Genesys Solar Charger Module is an integrated solution for charging various battery chemistries via solar power. Combined with an inexpensive 12V to 24V solar panel, the Solar Charger Module enables M2M/IoT devices to function autonomously without mains power.



## MULTI-CHEMISTRY WIDE INPUT CHARGER MODULE GBW-MH-201

The Genesys Multi-Chemistry Wide Input Charger Module is a compact flexible intelligent battery charger with power path control that can be configured to charge Li-ion or Lead-acid battery chemistries.

The module has input and output protection integrated which prevents damage to equipment and batteries if a fault was to occur. Genesys Modular Stack technology is also integrated, enabling smart monitoring of batteries.



## LITHIUM BATTERY PROTECTION BOARD **GBW-XN-200**

The Genesys Lithium Battery Protection Board allows battery charger modules such as the Genesys Solar Charger Module (GBW-XN-200) to monitor and charge lithium chemistry batteries. Both Lithium Ion and Lithium Polymer battery packs in 2, 3 or 4 cell (in series) configuration are supported.

The Lithium Battery Protection board is a all-in-one solution for battery protection and monitoring during charge and discharge.

## COMING SOON...

Genesys' range of M2M IoT modules supporting Genesys Modular Stack will soon be expanded with the following:

- UPS Modules: Qi (inductive), Primary Cell
- User Controls & Interfaces:
  - PIR Occupancy Sensing
  - Smoke Detector

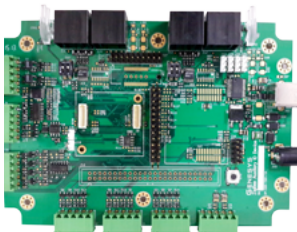
# BASEBOARDS CATALOGUE



## I/O BASEBOARD

**GBI-BG-200**

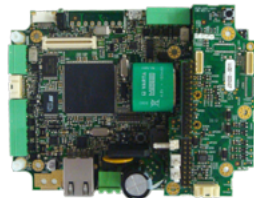
The Genesys I/O Base Board gives you a proven, low-cost platform to build your wired or wireless control network. The I/O Base Board has 2 A/D input channels and 2 D/A output channels along with 2 solid state relay outputs and 3 GPIO lines. This provides an excellent base for medium complexity control systems.



## I/O BASEBOARD PRO

**GBI-BG-200P**

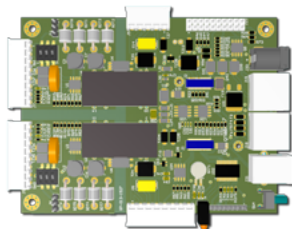
The Genesys I/O Base Board Pro gives you a powerful platform to build your advanced wired or wireless control network. The I/O Base Board Pro has 4 A/D input and 2 D/A output channels along with 2 solid state relay outputs and 9 GPIO lines; providing an excellent base for complex control systems. It can be augmented with the GUI accessory board (GBU-XN-200).



## EMBEDDED PROCESSOR PRO

**GBE-BY-200P**

The Genesys Embedded Processor Pro is designed for applications where the processing power offered by GMS processor boards (such as the 6LoWPAN module Pro GBI-ML-200P) needs to be complemented or enhanced. RTOS (Real Time Operating System) functionality is needed. The board boasts a 120MHz Cortex M3 microcontroller with 512kB internal flash memory and 96kB complemented with an external 4Mbit of SRAM.

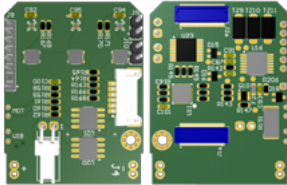


## ISOLATED 4-20mA LOOP BASE BOARD

**GBI-BS-201**

The Genesys Isolated 4-20mA Loop Base Board allows M2M/IoT-enabling of industrial current loop and voltage input instrumentation, and integration with other serial and parallel analog and digital interfaces. The Isolated Loop Base Board is fully compatible with Genesys Modular Stack allowing you to combine this system with other modules such as the Genesys 3G Module (GBI-MC-201) to create the ultimate industrial monitoring and control solution.

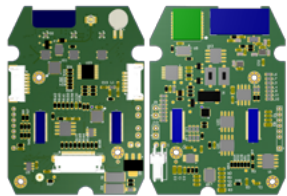
# BASEBOARDS CATALOGUE



## SENSOR BASE BOARD

**GBI-BS-200**

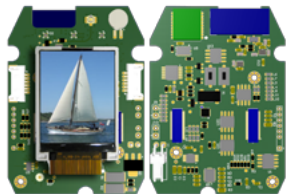
The Genesys Sensor Base Board is designed to be compact and low-cost. It is specifically intended to be retrofitted into “dumb” sensors and actuators to allow them to become part of the Internet of Things (IoT). Designed to be as robust as possible, the Sensor Base Board is designed for ultra-low power in battery powered system and includes robust I/O connections broken out.



## SENSOR BASE BOARD PRO

**GBI-BS-200P**

The Genesys battery-powered Sensor Base Board Pro includes all of the capability of the Sensor Base Board in addition to an array of sensors including GNSS location fixing, temperature sensing, humidity sensing, RTC and 9-axis accelerometer.

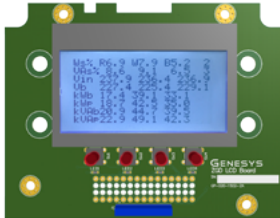


## SENSOR BASE BOARD ULTRA

**GBI-BS-200U**

The Genesys battery-powered Sensor Base Board Ultra is the ultimate in battery powered I/O and user configurability. This base board is capable of fulfilling the requirements of any application that requires battery power, mobility, advanced user interface, generic I/O devices integration and spatial environmental monitoring.

# BASEBOARDS CATALOGUE



## GUI ACCESSORY BOARD

GBU-XN-200

The Genesys GUI Accessory Board adds control and monitoring functionality to an I/O Base Board Pro. Featuring a vibrant 128x64 monochrome LCD screen, buttons, LEDs and optional keypad, the GUI Accessory Board lets you quickly glance at parameters of your choice without needing to go through the hassle of logging into your browser or smartphone.

## COMING SOON...

Genesys' range of M2M IoT baseboards will soon be expanded with the following:

- Network Processor Base Board
- Qi Charger Base Board
- Networked Touchscreen Platform Hardware



### **M2M IoT NETWORK SERVER**

**GEH-AM-200**

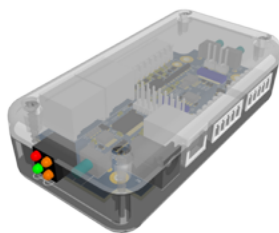
The central hub of your M2M installation, the Network Server aggregates data from all of your devices (via 6LoWPAN, Ethernet, Wi-Fi or RS-485) and allows them to interoperate with either themselves; or other locally or remotely connected devices. It also transforms your devices into Internet of Things (IoT) capable devices - connecting to the internet via 3G, Wi-Fi or Ethernet. For an additional layer of security and speed, Genesys' Cloud Server keeps rolling backups of your M2M settings.



### **M2M NETWORK FLOOR CONTROLLER**

**GEH-AM-201**

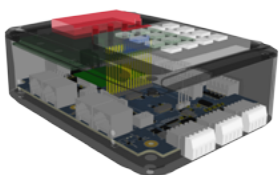
The Genesys M2M Network Floor Controller provides a low-cost, single-device solution for Internet-enabling a wired or wireless network of devices, allowing those devices to interoperate with themselves or other locally or remotely connected devices. It allows you to remotely configure, control, monitor and log your M2M/IoT network via the Internet. Receive email & SMS alerts & reports, and optimise time on site.



### **6LOWPAN GATEWAY/ROUTER**

**GEG-AM-200**

The 6LoWPAN Gateway/Router provides a transparent RS-485 tunnel over a wireless IEEE 802.15.4 standard, with 6LoWPAN connectivity. When installed, the Gateway allows for transparent communication between RS-485 busses over a wireless network, eliminating the need for long cabling. For example, control networks such as MODBUS can be elegantly installed with Internet connectivity via MODBUS TCP.



### **6LOWPAN GATEWAY/ROUTER PRO**

**GEG-AM-200P**

The 6LoWPAN Gateway/Router Pro provides multiple transparent RS-485 tunnels over a wireless IEEE 802.15.4 standard, with 6LoWPAN connectivity. The Pro version expands on the 6LoWPAN Gateway/Router by providing additional input and output channels, as well as the provisions to support a customisable user interface to suit your needs, including a 128x64 LCD, LEDs and a choice of 4 pushbuttons or 4x4 key pad.



## **6LoWPAN MESHING NODE**

**GEN-AM-201**

The 6LoWPAN Meshing Node is a versatile device that can operate as a stand-alone M2M access point, or as a wireless network repeater to boost the range of an existing M2M installation.

The Meshing Node comes equipped with Genesys Modular Stack technology, allowing it to seamlessly integrate with all compatible modules, including GPS, climate sensing, 3G/4G connectivity and Wi-Fi. Modules add functionality just by stacking on top of each other.

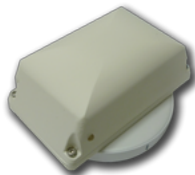


## **6LoWPAN MESHING NODE PRO**

**GEN-AM-201P**

The 6LoWPAN Meshing Node Pro provides advanced I/O functionality combined with full IEEE 802.15.4 interoperability.

Tough and reliable, the Meshing Node Pro is suitable for outdoor use and is built to withstand the most punishing of demands, even during power loss due to its high-capacity SLA uninterruptible power supply.



## **6LoWPAN SPATIAL SENSOR I/O NODE**

**GEN-AM-202**

The 6LoWPAN Spatial Sensor I/O Node is a fully featured portable M2M node with an integrated Lithium-Ion Polymer (LiPo) battery, giving you the flexibility to both control your device and monitor its surroundings including its physical location, with no strings attached. Enclosed in the Spatial Sensor I/O Node package is contactless charging interface for the integrated battery and includes GNSS location fixing, 9-axis accelerometer, temperature and humidity sensors pre-fitted on a Genesys Modular Stack module.



## **6LoWPAN SPATIAL SENSOR I/O NODE PRO**

**GEN-AM-202P**

The 6LoWPAN Spatial Sensor I/O Node is a fully featured portable M2M node with an integrated Lithium-Ion Polymer (LiPo) battery, giving you the flexibility to both control your device and monitor its surroundings including its physical location, with no strings attached. Enclosed in the Spatial Sensor I/O Node package is contactless charging interface for the integrated battery and includes GNSS location fixing, 9-axis accelerometer, temperature and humidity sensors pre-fitted on a Genesys Modular Stack module.





### KEYFOB NODE

**GBI-BA-200**

The Genesys Keyfob Base Board is a general purpose M2M/IoT actuator that offers a variety of I/O interfaces. The Base Board comes with real-time clock, buzzer, vibration motor and a set of three pushbuttons and RGB LEDs which can be readily configured for any application.

Intended as a low-cost solution, the Keyfob does not come with battery charging capabilities.



### KEYFOB NODE PRO

**GBI-BA-200P**

In addition to the capabilities offered by the standard Genesys Keyfob Base Board, the Pro version features a full suite of sensors including temperature sensing, humidity sensing, GNSS location acquisition, RTC and a three-axis accelerometer. The device supports the capability of contactless charging of the inbuilt rechargeable LiPo battery.



### KEYFOB NODE ULTRA

**GBI-BA-200U**

The Ultra-Keyfob extends on the capabilities of the Pro version with a resistive touch-based 1.8 inch TFT LCD screen and multiple LED/pushbutton shortcut keys as user the primary user interface. With the flexibility and greater interface options offered by touch technology, sophisticated GUI design possibilities are offered to the designer.



### M2M IoT NETWORK PROCESSORS

The Genesys M2M IoT Network Processor Pro series are industrial-grade NetComm Wireless\* NTC-6908, NTC-6200 or NTC-40WV modems fitted with custom software developed by Genesys to implement a configurable common data abstraction model that allows any type of IO device with any physical interface or communications channel to be made interoperable with any other device. This allows M2M functions such as logical grouping, bridging, tunnelling and scripting to be implemented seamlessly across an entire M2M system.

**GEP-PM-200P**

**GEP-PM-201P**

**GEP-PM-202P**

### COMING SOON...

Genesys' range of M2M IoT equipment will soon be expanded with the following:

- Touchscreen Network Processor/Floor Controller
- Touchscreen Terminal Node Equipment
- Flexible Equipment Powering Add-in Options



## BASE M2M INSTALLATION

**GSS-GM-200**

Genesys' next-generation M2M platform will not only enable your systems to communicate with each other in ways you've never imagined, but also to join the **Internet of Things (IoT)**. What this means for consumers is the flexibility to monitor and control systems via the web, and to open up new possibilities for installing systems anywhere in the world, all seamlessly communicating as if they were in the same room.



## BUILDING MANAGEMENT SYSTEM

**GSS-GM-201**

Turn your existing building into a Smart Building! Genesys' Building Management System is a customised M2M solution for enabling the systems in multiple building to be monitored and controlled remotely. Systems such as elevators, lighting, security, HVAC and energy monitoring can be controlled using a web interface, tablet or mobile phone.

Because Genesys' M2M technology is scalable, our system can be upgraded as your needs grow.



## OFFICE MONITORING & AUTOMATION

**GSS-GM-202**

Genesys' M2M Office Automation System provides a scalable, interactive solution to propel your workplace into an intelligent, connected future. Your central M2M IoT Network Server can be made to interface with any existing lighting, HVAC, security and access control systems. Genesys M2M IoT technology enables these disparate systems to work together seamlessly to provide a greener, more secure and more productive working environment.



### ELEVATOR MONITORING SYSTEM

GSS-GM-203

The M2M IoT Elevator Remote Monitoring system allows elevator systems to be remotely monitored over the Internet, using 3G/4G wireless connection, or an existing Internet site connection if available. Status signals available in the Plant Room can be remotely monitored, including Elevator Car movement, floor location door condition and alarms. Drive system status, performance and alarms can be monitored.

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### COMING SOON...

#### SMART ELECTRICITY METERING

M2M IoT technology can help you take control of your energy bill by monitoring power usage of high-powered devices and adjusting their settings accordingly. It can also take advantage of power companies' Time of Use based metering to optimise off-peak power usage. Features:

- MODBUS tunnelling over 6LoWPAN
- Touch Screen Control Terminal
- Monitoring via Mobile Device



### VISUALISATION TOOL FOR WEB

GTU-SM-200

The M2M IoT Viztool is an advanced web-based M2M ecosystem setup, monitoring and control tool; hosted either locally on your M2M IoT Network Server or Genesys' Cloud Server. Viztool can be used to configure and commission your Genesys M2M network from any desktop or mobile browser; including setting up machine-to-machine links. All real-time and historical logging data about ecosystem events, component activity and network communications are readily accessible in Viztool.



### VISUALISATION TOOL FOR ANDROID

GTU-AM-200

The Viztool for Android™ devices is an advanced M2M ecosystem setup, monitoring and control tool; compiled into a single mobile phone and tablet app. Viztool connects to your cloud- or self-hosted Genesys M2M infrastructure directly via web socket, eliminating HTTP overheads. Viztool takes advantage of the powerful multicore processors in today's phones and tablets to render slick, informative visualisations of your M2M network.

### COMING SOON...

#### VISUALISATION TOOL EXTENSION PACKAGES

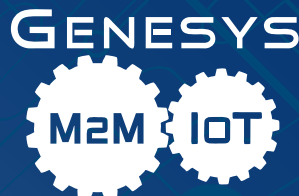
Genesys' Viztool platform is under constant development to provide users with greater levels of access as well as being easier to use; in addition to configurability of the common abstraction data model and system business logic.

# GENESYS

ELECTRONICS DESIGN

## ONE PASS TO PRODUCTION™ GUARANTEED.

- ▶ Product definition
- ▶ Circuit Design
- ▶ PCB Layout
- ▶ Software Development
- ▶ Verification & Testing
- ▶ Standards Compliance
- ▶ Production Engineering
- ▶ Manufacturing Management
- ▶ Specialist Capabilities:  
M2M/IoT Internet & System Architecture, Mains Power, High-Speed and RF Wireless EMC, safety and regulatory compliance.



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