The Genesys 6LoWPAN Gateway/Router provides a transparent RS-485/422 tunnel over a wireless IEEE 802.15.4 standard with 6LoWPAN connectivity.

When installed, the Gateway allows for transparent communication between RS-485/422 buses 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.

Multiple 6LoWPAN Gateway/Routers form a wireless network mesh. Each node has its own intelligence, using an IPv6 stack, allowing for point-to-point communication between any two devices on the network.

Via a connection to an external router, the 6LoWPAN Gateway/Router can output communications data to any mobile device or PC connected to the internet. Genesys can provide custom apps to suit the application.
CHARACTERISTICS

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

INTERNET CONNECTIVITY
- Transparent RS-485 connections between subnets via Internet
- Access and control of network from PCs or mobile devices via Internet
- Modbus TCP enabled

RS-485/422
- 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-485/422 cable
- MODBUS RS-485/422 Master

I/O
- Protected I/O
- 2 A/D input channels 0 to 3V3
- 2 D/A output channels 0 to 3V3
- 2 Solid State Relay outputs 30V 1.2A
- 3 GPIO lines 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
- Dual TX/RX indicator LEDs
- Dual status indicator LEDs
- Two user pushbuttons
- Reset button
- Remote monitoring and control via mobile app

PHYSICAL
- Dimensions: 50 (W) by 100 (H) by 30 (D) mm
- Weight: 100 g

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

POWER
- Supply Voltage - 5VDC to 9VDC
- Power Consumption (Operating) - 300mW
- Power Consumption (Standby) - 50mW