

GV-CONTROLLER (IOT HUB)

Greenivity's GV-Controller (IoT Hub) is a HomePlug Green PHY Powerline Communications (PLC) Smart LED Lighting Development platform that features a GV7011-MOD ZigBee/PLC or GV7013-MOD PLC and an ARM9 processor to provide intelligence and communications for Smart LED and Smart Home and Building Automation applications.

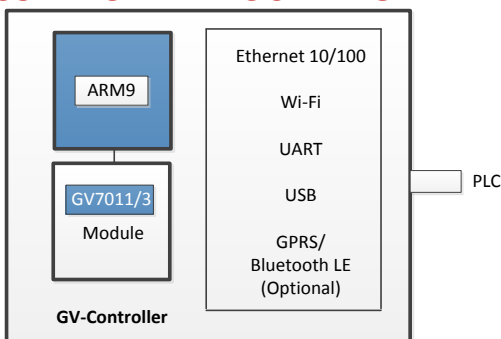
PRODUCT DESCRIPTION

Greenivity's GV-Controller is a development platform aimed at Smart LED and Smart Home and Building Automation applications. The GV-Controller is powered by either a GV7013 Hybrii-Mini with HomePlug Green PHY (HPGP) powerline communication (PLC) or a GV7011 Hybrii-XL with HPGP PLC and ZigBee wireless. It also includes an ARM9 processor to form the communication backbone and provide intelligence to a LED network. The GV-Controller (master) is designed to utilize the GV-LED (slave) and GV-Sensor (slave) as an option to control and monitor a LED network.

The GV-Controller features Wi-Fi, Ethernet, USB, SPI, UART, and Bluetooth Low Energy (BLE) and GPRS as orderable options. Wi-Fi and Ethernet allows for indoor/outdoor gateway remote access between the GV-Controller and a mobile apps (iOS and Android) while GPRS is used for long distance communication and Bluetooth BLE allows for short range and low power Smart Home communications.

For increased flexibility, the GV-Controller features 32kB SRAM data memory and 64Mb SDRAM program memory which stores Greenivity's application software. For quick time-to-market, Greenivity's application software can be customized through XML or C API for specific applications.

GV-CONTROLLER BLOCK DIAGRAM



GV-CONTROLLER FEATURES

- Provides Smart LED lighting and Smart Home and Building automation intelligence
- The GV-Controller (master) monitors and controls a LED network with the use of GV-LED (slave) and GV-Sensor (slave) as orderable options
- Provisions to support either a GV7011 Hybrii-XL PLC/ZigBee or a GV7013 Hybrii-Mini PLC
- Transmits LED commands through powerline enabled by the GV7011 or the GV7013 SoC
- Compliant to HomePlug Green PHY standard
- ARM9 processor features 32KB SRAM data memory and 64MB SDRAM for program memory
- Supports Linux OS with IPv4, IPv6 and TCP
- Wi-Fi IEEE 802.11 b/g/n wireless connectivity
- RJ45 Ethernet connector
- 4-Port USB Hub
- SD micro-SD for Linux Kernel and Linux filing
- Gateway software allows for XML or API based interface.
- Controllability of turning on/off, dimming, color temperature and color RGB change
- Features color or dimming level scheduling
- GPRS and Bluetooth Low Energy (BLE) as options

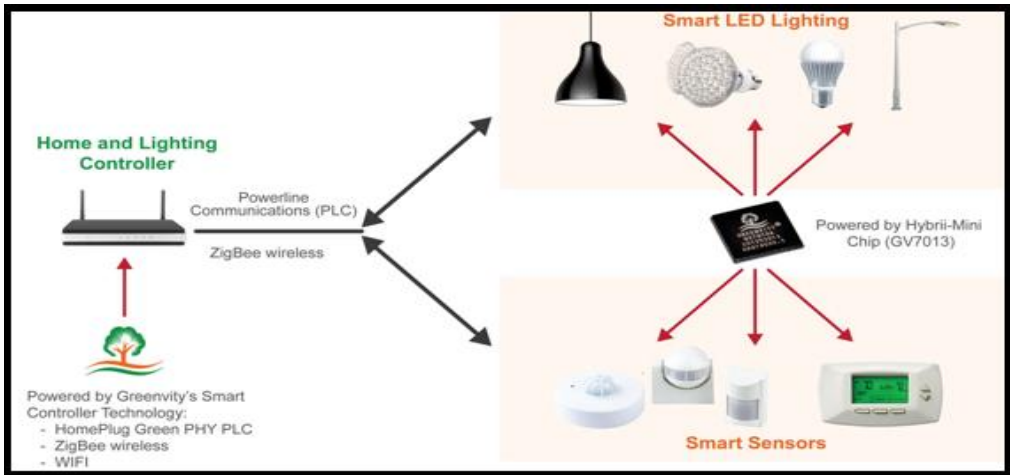


TARGET APPLICATIONS

- Smart LED lighting control
- Smart energy management for home, building & multi dwelling unit
- Smart appliances & smart home device

ORDERING CODE

Ordering Code	Description
GV-Controller (IoT Hub)	Home Gateway and LED Lighting Controller
GV7013-LED-DP	Complete LED Lighting Control Development Platform
GV-LED	Smart LED driver module
GV-Sensor	All-in-One Sensor module
GV7011/3	Hybrii-XL chip (HPGP & ZigBee) or Hybrii-Mini chip (HPGP)



Smart LED Lighting with Sensor Networking

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