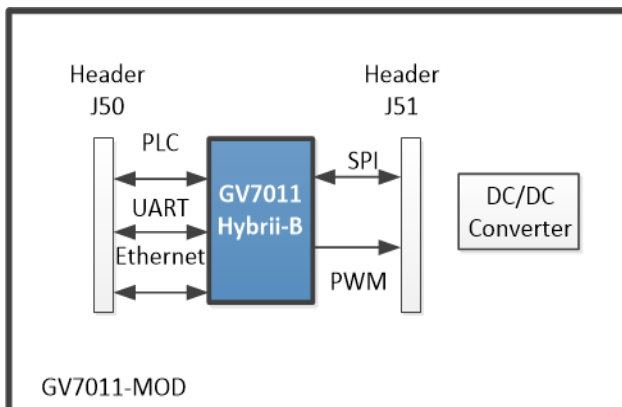# GV7011-MOD

Greenvity's GV7011-MOD is a module featuring the GV7011 Wideband Powerline and 2.4GHz IEEE802.15.4 Wireless SoC meant for use with the Universal IoT Hub (GV-Controller-S).

PRODUCT DESCRIPTION

The GV7011-MOD is a wideband powerline and 2.4GHz IEEE802.15.4 wireless communications module powered by Greenvity's GV7011 Hybrii-XL SoC. The GV7011-MOD delivers half-duplex, asynchronous data communication over (50/60 Hz) AC and DC power lines at PHY data rates up to 9.8 Mbps and 2.4GHz, 255kbps wireless communications over the air while featuring SPI, UART and Ethernet. The GV7011-MOD is part of Greenvity's family of products meant to operate with the GV-Controller-S.
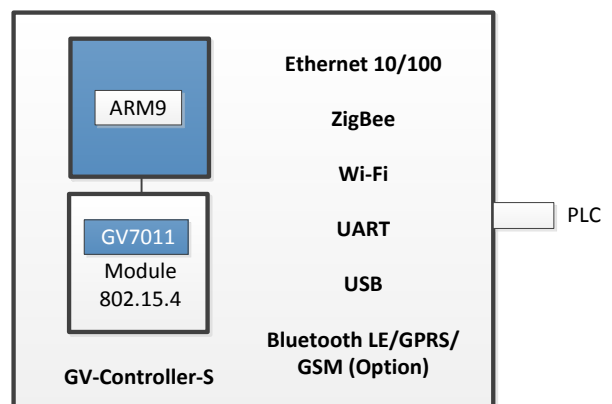
GV7011-MOD FEATURES

1. On-board GV7011 Powerline and 802.15.4 Wireless SoC
2. Wireless 802.15.4 255kbps bandwidth
3. Functions on up to 277 VAC and on DC lines
4. Wideband powerline frequencies from 2 to 30 MHz
5. Utilizes a single low cost 24 MHz crystal
6. Supports multiple host interfaces including Ethernet, SPI, UART, and features GPIO pins
7. Includes LED PWM and 0 to 10V outputs which eliminates the need for external LED drivers
8. Powered by a +12VDC and +5VDC.
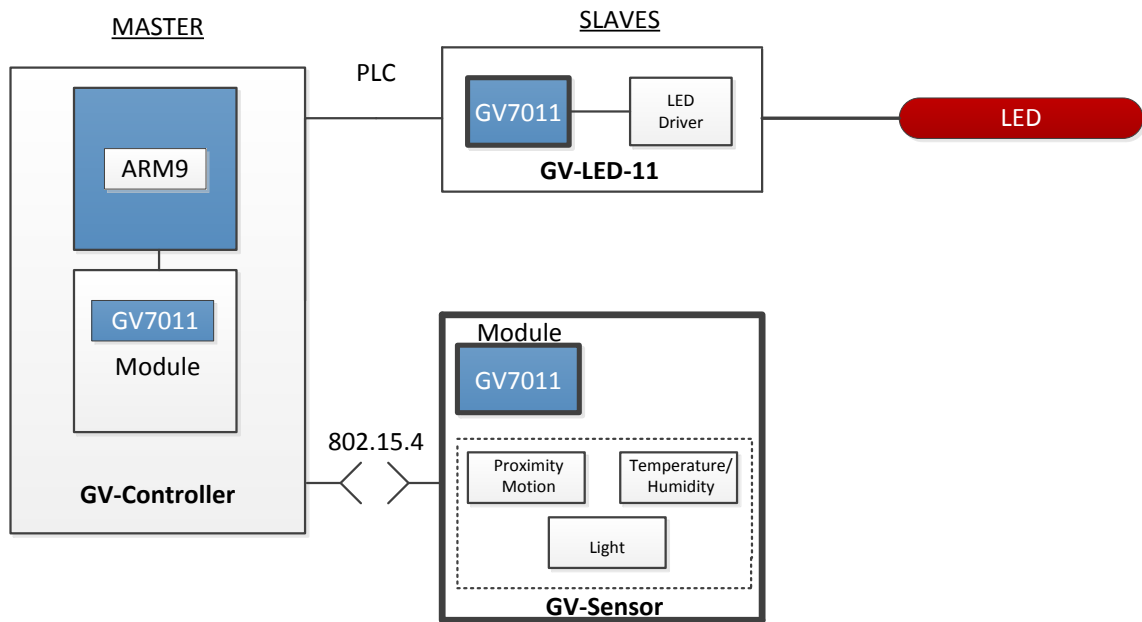9. Industrial temperature range from -40 to +85˚C

GV-Controller-S with GV7011-MOD

The GV7011-MOD is designed to operate with the GV-Controller-S through header pins and physically docks to the top side of the GV-Controller-S. When the GV7011-MOD is paired with the GV-Controller-S, it can be used as a Master within a LED system. In order to complete a LED system, Greenvity offers the GV-LED-11 and the GV-Sensor to form a Smart LED system.

GV7011-MOD BLOCK DIAGRAM

4.4 x 3.8 cm^2
GV7011-MOD Block Diagram

GV-Controller-S with GV7011-MOD Block Diagram

Smart LED System featuring the GV-Controller-S, GV-LED-11 and GV-Sensor

MASTER

SLAVES

PLC

ARM9

GV7011

GV7011
LED
Driver

LED

GV-LED-11

GV7011

Module

Module

GV7011

802.15.4

Proximity
Motion

Temperature/
Humidity

Light

GV-Controller

GV-Sensor

Control the Internet of Green Things™

TARGET APPLICATIONS

- Smart LED Lighting Control
- Controlled LED lighting, signage and display
- Home/Building Energy Management System

ORDERING CODE

Ordering Code	Description
GV7011-MOD	**Powerline + 802.15.4 wireless module**
GV-Controller Universal IoT Hub	Home Gateway and LED Lighting Controller
GV-Sensor	All-in-One Sensor module
GV7011	Hybrii-XL SoC

Greenvity products power and control many IoT devices

Universal IoT Hub — PLC wireless

Smart LED Lighting Control with Sensor Network

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