



LUMICEL®

Series

MeshConnect™ Radio Modules

P/N 99005

LUMICEL® series uses CEL's 2.4Ghz IEEE 802.15.4/ZigBee MeshConnect™ module which is based on Intel 8051 MCU core. LUMICEL® is specifically designed for LED lighting operations. LUMICEL® has the following features for LED lighting control:

- Motion sensing dependent ON/OFF of LED up to 3 motion sensors are serviced
- Day light saving allows LED dimming for energy savings
- Isolated digital I/O , 4 inputs and 4 outputs
- LED dimming using analogue 0-10 Vdc with on board 10Vdc voltage reference
- LED dimming using Pulse Width Modulation (PWM) , 2 independent channels
- Real Time Clock and Calendar for standalone ON/OFF and LED dimming schedule
- Programming languages supported are Python and C-language

LUMICEL® can communicate messages to other LUMICEL® modules either using unidirectional (unicast) or multidirectional (multicast) messaging techniques. Every LUMICEL® can send and receive messages from any LUMICEL® if it is configured part of the group that it belongs to.

LUMICEL® can be attached to a LUMIDIM® module for PWM dimming only, where up to 4 channels of LED lights may be controlled with one radio. For more information consult LUMIDIM® data sheet.

LUMINET® graphical user interface (GUI) software when installed in a standard PC allows, one to upload application software, download data and LUMICEL® configuration, group designation, zone designation and specific functional identity given to a LUMICEL® node.

Electrical Specifications:

- Input power: 10-24Vdc @ max 1 Amp current
- Optically Isolated I/O: 4 inputs and 4 outputs
- Wired Communication: RS232 serial
- Dimming: 0-10 Vdc analogue or PWM output 0-100% duty isolated output
- Light sensing: Photocell input 10K ohm dark resistance

Mechanical Specifications:

- Temp range: 0-50 deg C operating -30 to 65 deg C storage
- Dimensions: W2.0" x L5.0" x H1.0"
- Terminations: Headers