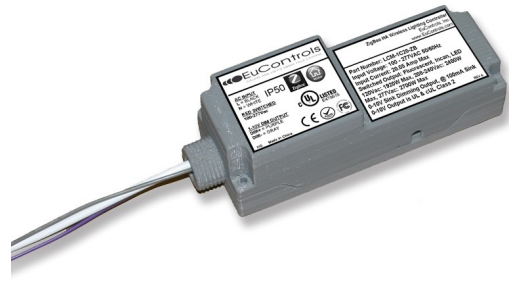


Wireless Lighting Controller ON/OFF & 0(1)-10V Dimming



Wireless Dimmer
LCM-1C20-ZB
Wireless

Product Features

- ZigBee Wireless Control of Luminaires
- +20dBm ZigBee transmit power
- ON/OFF and 0(1)-10V Analog Dimming Control, 100mA Sink
- Compatible with Electronic Ballasts & LED Drivers that comply with IEC60929 Annex E2, 1-10V Dimming.
- ON/OFF AC switching up to 277Vac
- Stores last dim setting even when powered off.

Environmental

1. Operating temperature: Tc Maximum 72 °C, Ambient -5 to +50°C Max.
2. Storage temperature range: -40 to +80°C
3. Humidity (non-condensing): 5% - 95%RH
4. Cooling: Convection
5. Vibration Frequency: 5-55Hz/2g, 30 minutes
6. Impact resistance: 1g/s

Safety and Compliance

1. UL244A Listed
2. FCC, 47CFR Part 15 Class B compliant
3. ZigBee HA Certified
4. Damp, Dust Proof Design IP50

Electrical Specifications at 25°C

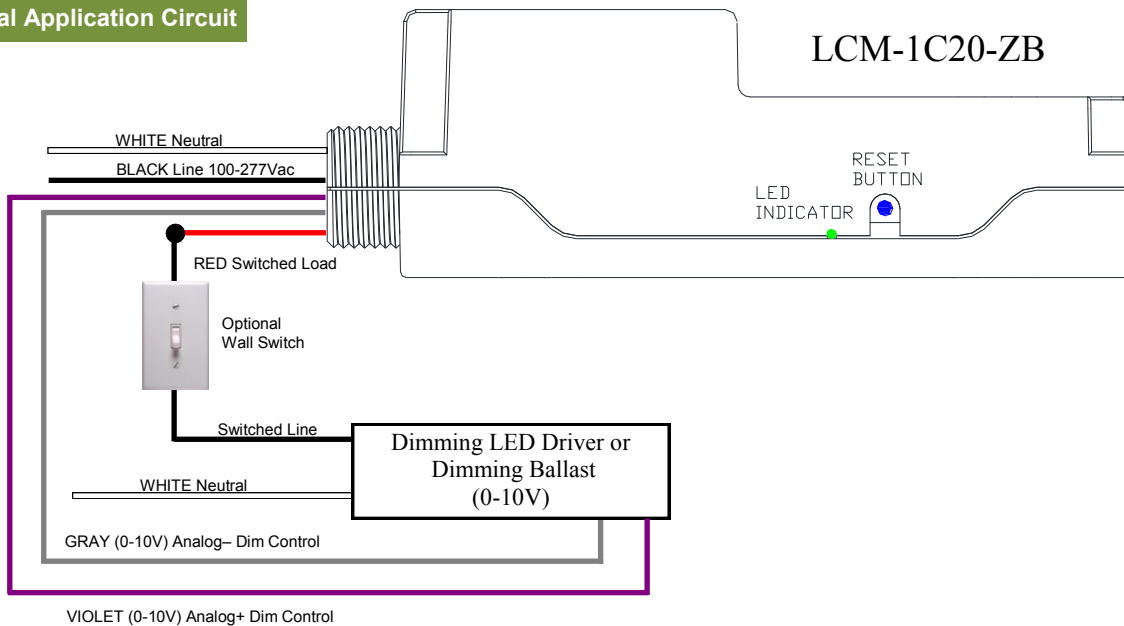
- Input voltage range: 100-277Vac
- Frequency: 47 - 63HZ
- AC Relay Switched Current: ≤20A Resistive, See Page 3 for load ratings.
- AC Zero Cross Switching
- Input current Module Power: ≤0.05A for Units power use

Part Numbers



Part Number	Dimming US Class 2	Dimming CN Class 2	Control	ON/OFF Control	0(1)-10V Analog	AC Relay Voltage Range	AC Relay Maximum Current
LCM-1C20-ZB	YES	YES	ZigBee HA	YES	YES	100-277Vac	20A

Typical Application Circuit

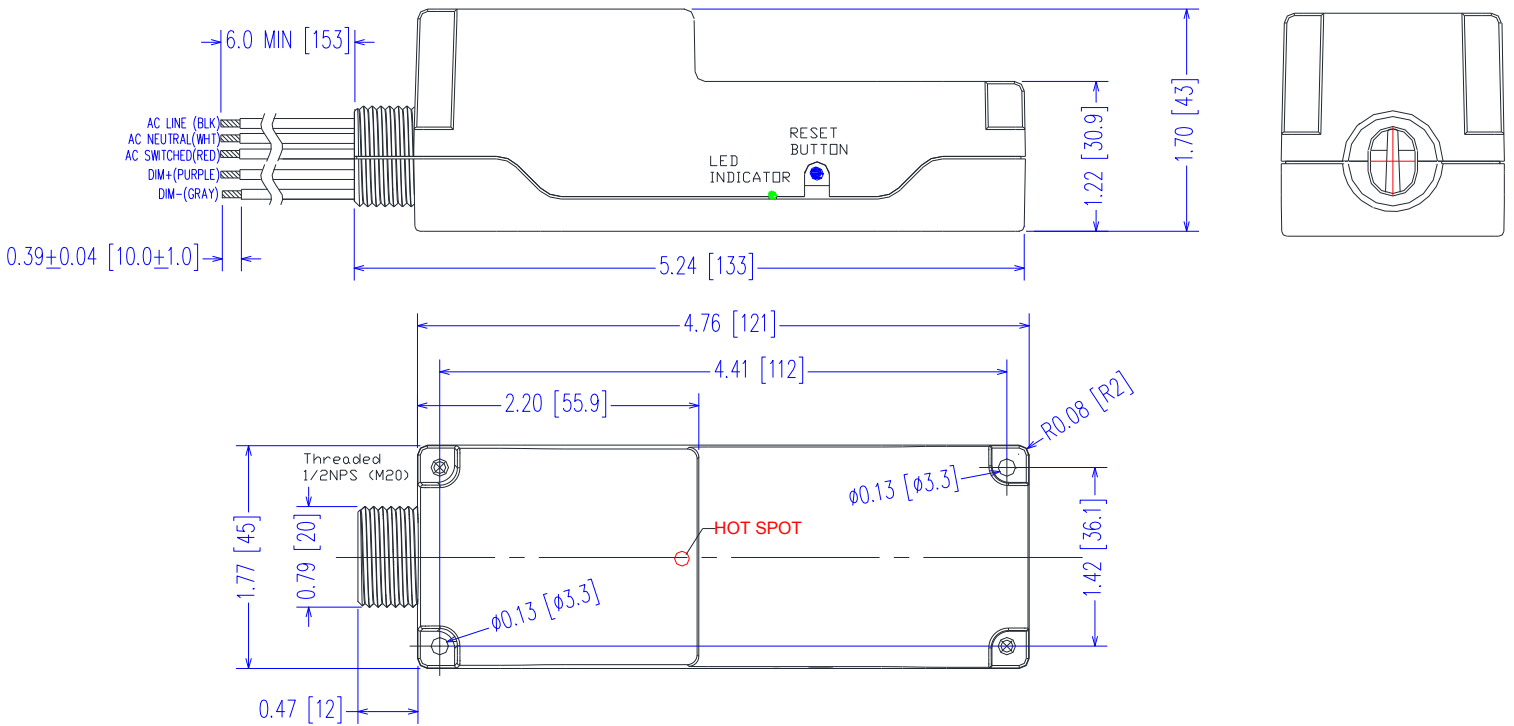
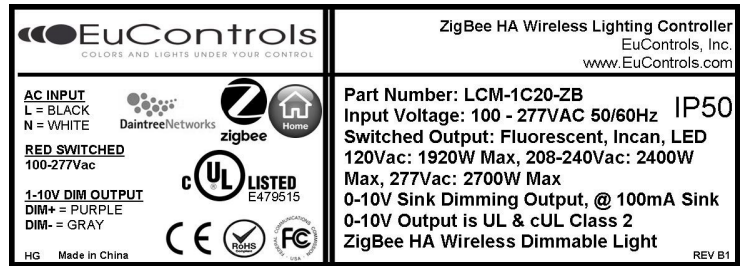


Max Rated AC Relay Loads (RED Wire): AC Zero Cross Switching
 Fluorescent Ballasts, LED Drivers, Incandescent & Inductive Loads:
 2,700W @ 277VAC, 10A
 2,400W @ 208-240VAC, 10A
 1,920W @ 120VAC, 16A
 AC Resistive Load: 100-277Vac 50/60Hz, 20A Maximum.

Wireless Lighting Controller ON/OFF & 0(1)-10V Dimming

Mechanical Dimensions: Inches [mm]
 Material: Gray 5VA PC ABS Plastic Case
 Weight: 140 Grams (5.0 oz.) Typical

Labeling Example



Wireless Lighting Controller ON/OFF & 0(1)-10V Dimming

Input Specifications

Parameter	Min.	Typ.	Max.	Notes/Conditions
Input Voltage	90 Vac	—	277 Vac	120, 230, 240, 277 Vac Nominal Values
Input Frequency	47 Hz	—	63 Hz	50/60Hz Nominal
ZigBee Control Transmit Power	—	—	+20dBm	ON/OFF and 11 Step log dimming, Standard ZigBee

Output Specifications

Parameter	Min.	Typ.	Max.	Notes/Conditions
AC Relay Switch ON/OFF (Vac)	0	—	277Vac	Isolated Relay N/O Contacts, AC Zero Cross Switching
AC Relay Load @120VAC (W)	0	—	1,920W	16A, Fluorescent, LED Drivers, Incandescent & Inductive Loads
AC Relay Load @ 208-240Vac (W)	0	—	2,400W	10A, Fluorescent, LED Drivers, Incandescent & Inductive Loads
AC Relay Load @ 277Vac (W)	0	—	2,700W	10A, Fluorescent, LED Drivers, Incandescent & Inductive Loads
AC Relay Load Resistive (A)	0	—	20A	Resistive Loads
Relay Inrush Current (Peak)	—	—	250A	Measured at 120Vac/60Hz Input 10% I _{peak} duration ~2100 μsec (1/2*I _p ² *t) Design uses AC Zero Cross Switching
Relay Inrush Current (I ² t)	—	—	65 A ² s	
Sink Current on 0-10V (+) Purple Wire	0mA	—	100mA	IEC60929 Annex E2
Absolute Voltage Range on 0-10V (+) Purple Wire	-20.0V	—	+20V	IEC60929 Annex E2
Dimming Range	0.5V	—	+10V	Ballast or Led Driver provides Dim Voltage & Current per IEC60929 Annex E2, 0(1)-10V Analog Dimming

Environmental Specifications

Parameter	Min.	Typ.	Max.	Notes/Conditions
Case Temperature (Tc)	—	—	+72 °C	Measured at location specified on case.
Operating Temperature (Ta)	-5 °C	—	+50 °C	Operating temperature range.
Storage Temperature (Ts)	-40 °C	—	+85 °C	Non operating temperature range.
Operating Humidity	—	—	95% RH	Relative Humidity, non-condensing.
Vibration	5 Hz	—	55 Hz	2G, 10 minutes/1 cycle, period 30 minutes, each along X, Y, Z axis.

Safety & EMC Compliance

Safety	Notes/Standards
UL/CUL Listed	UL244A, UL2043 Plenum Rated
CE	EN61347-1, EN61347-2-13
Withstand Voltage Relay	Input to Output Across Relay Contacts: 700 Vac
Withstand Voltage AC In to Dim Out	Input to DIM: >1750 Vac
Dimming Circuit	UL & cUL Isolated Class 2, Dim+ Purple/Dim- Gray
FCC	Compliant Class B

**Wireless Lighting Controller
ON/OFF & 0(1)-10V Dimming**

Wireless Dimmer

Wireless
LCM-1C20-ZB

