

Description

The Autani Wireless Lighting Controller scheduling switch is ideal for commercial, office, and industrial applications, providing ZigBee wireless control of luminaires. The virtual on/off function improves lighting efficiency and reduces energy costs by up to 50%. The wireless smart switch enables fine control over multiple groups of sensor-connected, smart lights with 100 step variables.

Applications

Autani's Wireless Lighting Controller is suitable for renovation, upgrade, and new construction projects

- Private & Open Offices
- Corridors & Hallways
- Classrooms & Gymnasiums
- Warehouse Spaces & Manufacturing Areas
- Patient Care Rooms
- Transportation Terminals
- Retail & Grocery Stores

Features

- ZigBee wireless control of luminaires
- ZigBee HA Compliant
- +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
- Secure wireless communications with Autani EnergyCenter devices



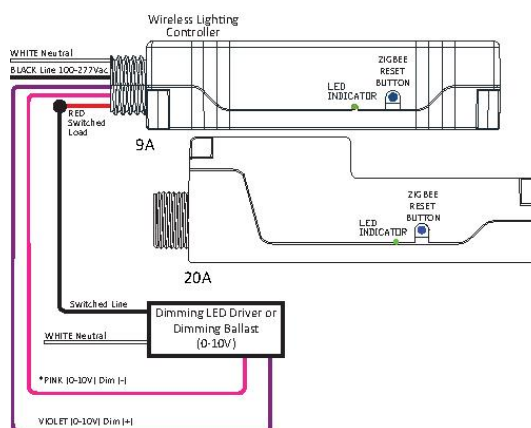
Electrical

- Input voltage range: 100-277VAC
- Frequency: 47 - 63Hz
- AC Relay Switched Current: <20A Resistive
- AC Zero Cross Switching
- Input Current Module Power: <0.05A for Units power use

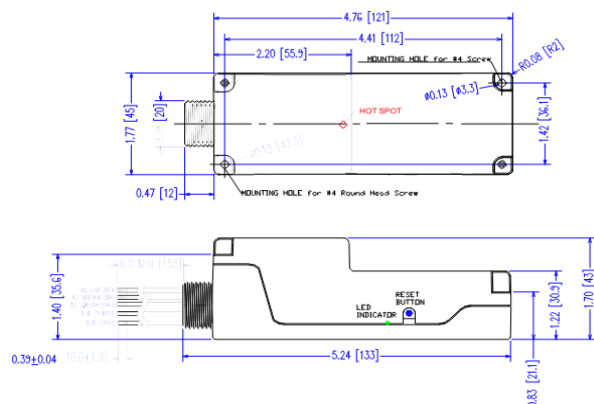
Environmental

- Operating Temperature: -20 to +50°C
- Storage Temperature Range: -40 to +80°C
- Humidity (non-condensing): 5% - 95%RH
- Cooling: Convection
- Vibration Frequency: 5-55Hz/2g, 30 minutes
- Impact Resistance: 1g/s

Wiring



Dimensions



INSTALLATION & MOUNTING INSTRUCTIONS

Case can be mounted using the 2 mount holes provided.
1 each #4 x 1-1/2" and 1 each #4 x 1" Round Head Screws or equivalent.

Ordering Information

SKU	Description
ARD20-ZB	ZigBee Indoor Lighting Controller with Dimming, 20A <i>Wireless relay for control of 20A Circuit; 100mA 0-10V dimming output</i>

Environmental Specifications

Parameter	Min.	Max.	Notes
Case Temperature (Tc)	---	+72 °C	Measured at location specified on case
Operating Temperature (Ta)	-20 °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

Input Specifications

Parameter	Min.	Max.	Notes
Input Voltage	90 Vac	277 VAC	120, 230, 240, 277 VAC Nominal Values
Input Frequency	47 Hz	63 Hz	50/60 Hz Nominal
ZigBee Control Transmit Power	---	+20 dBm	ON/OFF and 0-10V dimming, Standard ZigBee

Output Specifications

Parameter	Min.	Max.	Notes/Conditions
AC Relay Switch ON/OFF (VAC)	0	277VAC	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	1,920W	8A, Fluorescent, LED Drivers, Incandescent & Inductive Loads
AC Relay Load @ 277Vac (W)	0	2,216W	8A, Fluorescent, LED Drivers, Incandescent & Inductive Loads
AC Relay Load Resistive @ 120-277VAC (A)	0	20A	Pure Resistive Load
Relay Inrush Current (Peak)	—	250A	Measured at 120VAC/60Hz Input, 10% Ipeak duration ~2.1msec
	—	370A	Measured at 277VAC/60Hz Input, 10% Ipeak duration ~1.25msec
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	0.3V	+10V	Ballast or Led Driver provides Dim Voltage & Current per IEC60929 Annex E2, 0(1)-10V Analog Dimming

Safety & EMC Compliance

Safety	Notes/Standards
UL/cUL Listed	UL244A, UL508, CSA22.2 NO. 14-13, 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
EN 61000-4-5	Part 4-5: Surge Immunity test, 2 kV L-N