Synapse®

TL7-B2
Twist Lock Lighting Controller

Specification Data

Job Name	
Type	
Catalog #	
Comments	

Product Overview

The **TL7-B2** is an intelligent wireless lighting controller with exceptional fault tolerance and a multitude of features. Each TL7-B2 provides intelligent On/Off switching, dimming, highly accurate power metering, digital sensor input, and status monitoring of lighting fixtures.

Key Features:

- Integrated Photocell
- NEMA/ANSI C136.41 7-pin Dimming Receptacle Support
- Utility grade power monitoring
- Remote control and scheduling
- Flexible Dimming Controls
- Secure, over-the-air upgrades to support future enhancements
- Seamless integration into the SimplySNAP lighting control system
- Digital sensor input for motion sensing
- 24V DC Power for Motion Sensors

Includes Photocell, Power Monitoring, and External Sensor Input

Product #	Description
TL7-B2	Low Voltage Twist-lock Wireless Lighting Control with Built in Photocell

Dimensions	3.5" W x 3.86" H (88.6 mm W x 98 mm H)
Input Power	110-277VAC +/- 10% (Max 305V), 60Hz
Operating Environment	-40°C to +70°C; 0% to 90% RH non-condensing; IP66
Switched Output	Default ON
Load Rating	5A @ 110-277VAC (+/- 10%)
Surge Rating	6kV
Dimming Control	0-10 V with short circuit protection
Dimming Output	0-10V, 20mA
Radio	SNAP 2.4GHz; 802.15.4 +20dBm Transmit power -104dBm Receive Sensitivity
Sensor Input	0-24V Digital Input
Sensor Power	24V, 20mA
Power Monitoring	Utility Grade - 2% Accuracy
Power Readings	Voltage, Watts
Certifications*	FCC, IC, cULus, DLC
Warranty	5 Years

Lighting Controls

* Pending as of August 2018

TL7-B2 Wiring Diagrams

C136-41 SOCKET

LUMINAIRE BODY

SURGE
PROTECTION
10KV

AC LINE

NEUTRAL

120VAC TO 277VAC

NEUTRAL

LED Driver

AC LOAD

AC LOAD

DIM +

DIM -

COMMON

Black
White
Red
Violet
Grey
Orange
Brown

24V SENSOR POWER

MOTION
SENSOR

NEUTRAL
WHITE WIRE

DIM +
VIOLET WIRE

DIM -
/COMMON
GREY WIRE

LINE
BLACK WIRE

ROTATE CENTER

NORTH
INDICATOR

LOOSEN SCREWS

TL

SENSOR
CONTROL
ORANGE WIRE

24V SENSOR POWER
BROWN WIRE

LOAD
RED WIRE

Compliant with:
ANSI C136-41 (7& 5 pin) twist-lock receptacles.
Receptacle not included.

Lighting Controls

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