

Specification Data	
Job Name	
Type	
Catalog #	
Comments	

PRODUCT OVERVIEW

The **TL7-HVG** is an intelligent wireless lighting controller designed for high voltage applications. Each TL7-HVG provides intelligent On/Off switching, dimming, external sensor input, highly accurate power metering, and status monitoring of lighting fixtures.

KEY FEATURES:

- Integrated Photocell
- NEMA/ANSI C136.41 7-pin Dimming Receptacle Support
- Power Monitoring
- Remote control and scheduling
- Secure, over-the-air upgrades to support future enhancements
- Seamless integration into the SimplySnap lighting control system
- 24VDC Power for Motion Sensors
- Built in surge protection- ANSI C136.2, 6kV



Includes Photocell, Power Monitoring, and External Sensor Input

Product #	Description
TL7-HVG	High Voltage Twist-lock with Built in Photocell

Dimensions	3.3" D x 3.9" H (84 mm D x 98 mm H)
Input Power¹	110-480VAC +/- 10%, 60Hz
Load Rating	5A @ 110-277VAC (+/- 10%) 3A @ 347VAC (+/- 10%) 2A @ 480VAC (+/- 10%)
Surge Rating	6kV
Operating Environment	-40°C to +70°C; 0% to 90% RH non-condensing
IP Rating	IP66
Photocell	Dusk (10fc) Dawn (40fc)
Dimming Output	0-10V, 20mA
Radio	SNAP 2.4GHz; 802.15.4 +20dBm Transmit power -103dBm Receive Sensitivity
Sensor Input	0-10V Analog/Photocell 0-24V Motion Sensor
Sensor Power Supply	24VDC @ 20mA
Power Monitoring²	2% accuracy
Power Readings	Voltage, Watts
Certifications	FCC, IC, cULus, DLC, RoHS
Warranty³	5 Years



To learn more, call or visit:
synapsewireless.com
 (877) 982-7888

LIGHTING CONTROLLER

Footnotes:

1. Phase to Phase power is supported, however the controller only switches one phase.
2. 2% accuracy down to 100 Watts
3. See www.synapsewireless.com/warranty for warranty terms

TL7-HVG WIRING DIAGRAMS

**C136.41 SOCKET
TOP VIEW**

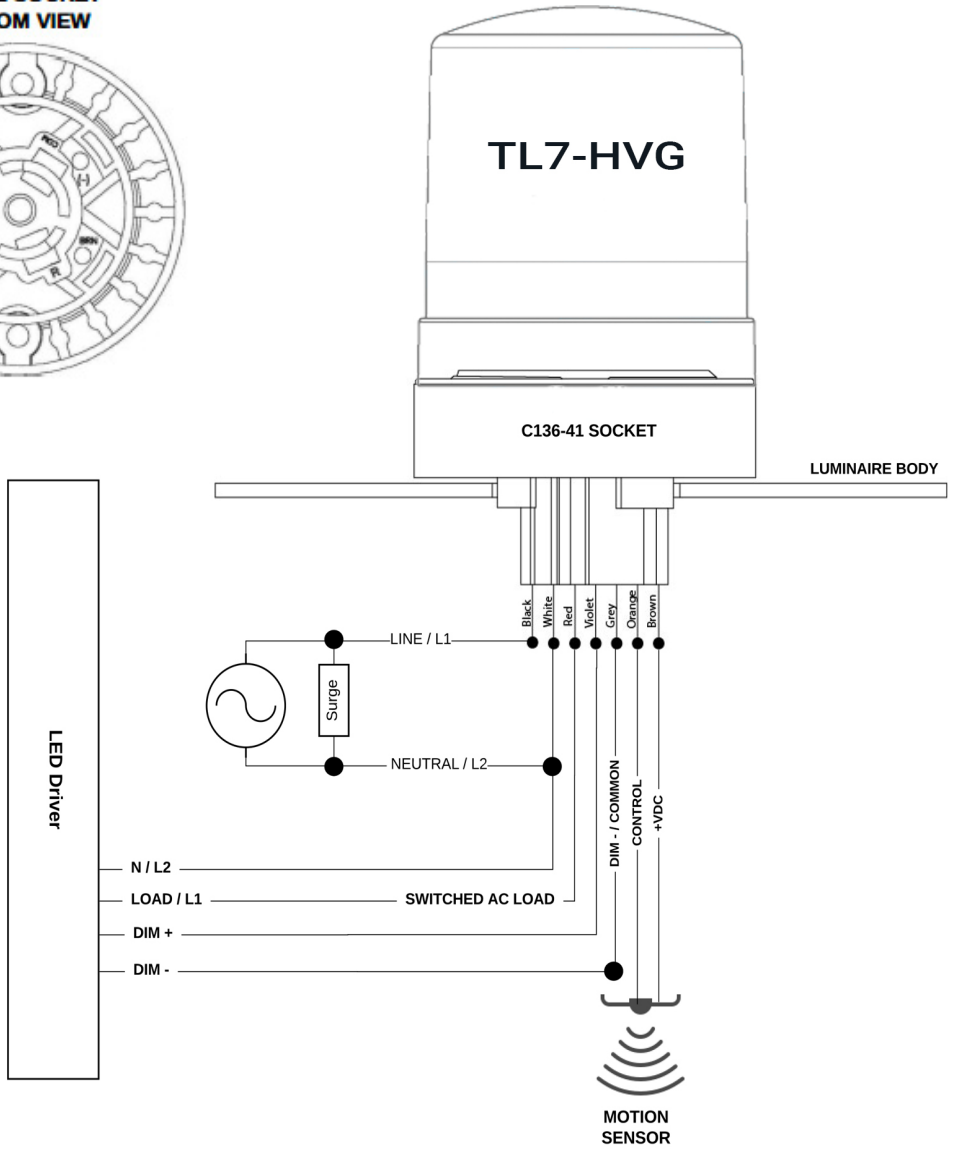


**C136.41 SOCKET
BOTTOM VIEW**



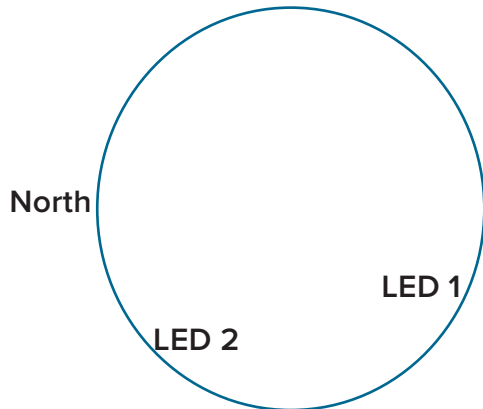
Function	Wire
L / L1	BLACK
N / L2	WHITE
LOAD / L1	RED
DIM +	VIOLET
DIM - / COMMON	GREY
CONTROL	ORANGE
+VDC	BROWN

Note: Phase to Phase power is supported, however the controller only switches one phase.



LIGHTING CONTROLLER

STATUS LED LIGHTS



Top View of TL7-HVG

LED	Color	Status
LED 1	Blue	Network Found, No Configuration
LED 1	Green	Normal Operation
LED 1	Red	Communication Error
LED 2	Green	Relay Closed
LED 2	Off	Relay Open