



SLLP LED PANEL LUMINAIRE

DESCRIPTION

Typically used to replace 2'x2' and 2'x4' fluorescent fixtures, the LED flat panel is designed to lay in drop ceilings in offices, schools, and healthcare applications. The flat panels are fully dimmable, and are compatible with building controls, motion sensors, timers, and daylight harvesting systems.

The design of the panels produces an even, consistent shadowless light. The LEDs enable long life, high lumen maintenance, and are low maintenance and constructed without hazardous materials

SPECIFICATION FEATURES

Construction & Materials

- Aluminum frame maximizes LED lifetime and optimal performance
- Light weight design allows for a less obtrusive installation

Electrical System

- High efficiency driver
- Input Voltage: 120-277V, 347V/480V optional, 50/60Hz
- Operating Temperature: -20°C (-4°F) to 40°C (104°F)
- 0-10V Continuous dimming
- Power Factor: >0.90
- Total Harmonic Distortion: <15%

Optical System

- High impact polycarbonate optics provides even distribution
- Frosted lens provides maximum glare reduction

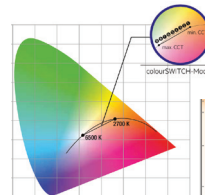
LED

- CRI: 80+,90+
- Color Tunable 3000K to 5000K
- Calculated L_{70} Lifetime: 349,000 hours @25°C
- Reported L_{90} Lifetime: 101,000 hours @25°C

Warranty

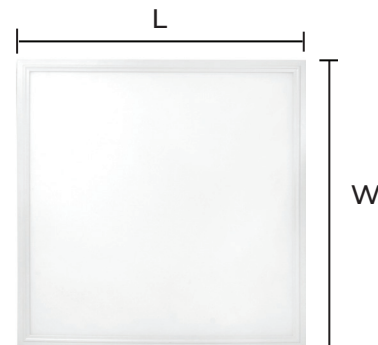
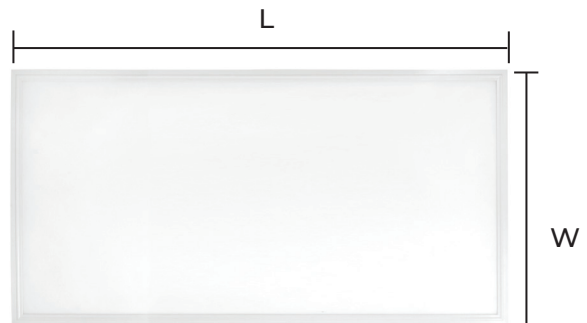
- 10 Years

Project:	
Type:	
Note:	



DR Dynamic Range 3000K to 5000K

DIMENSION



Model	L	W	H
1x4	1213	303	43
2x2	603	603	43
2x4	1213	603	43



ORDER INFORMATION

SLLP LED PANEL LUMINAIRE

Example: SLLP-24-50-CS-80-SD-SE

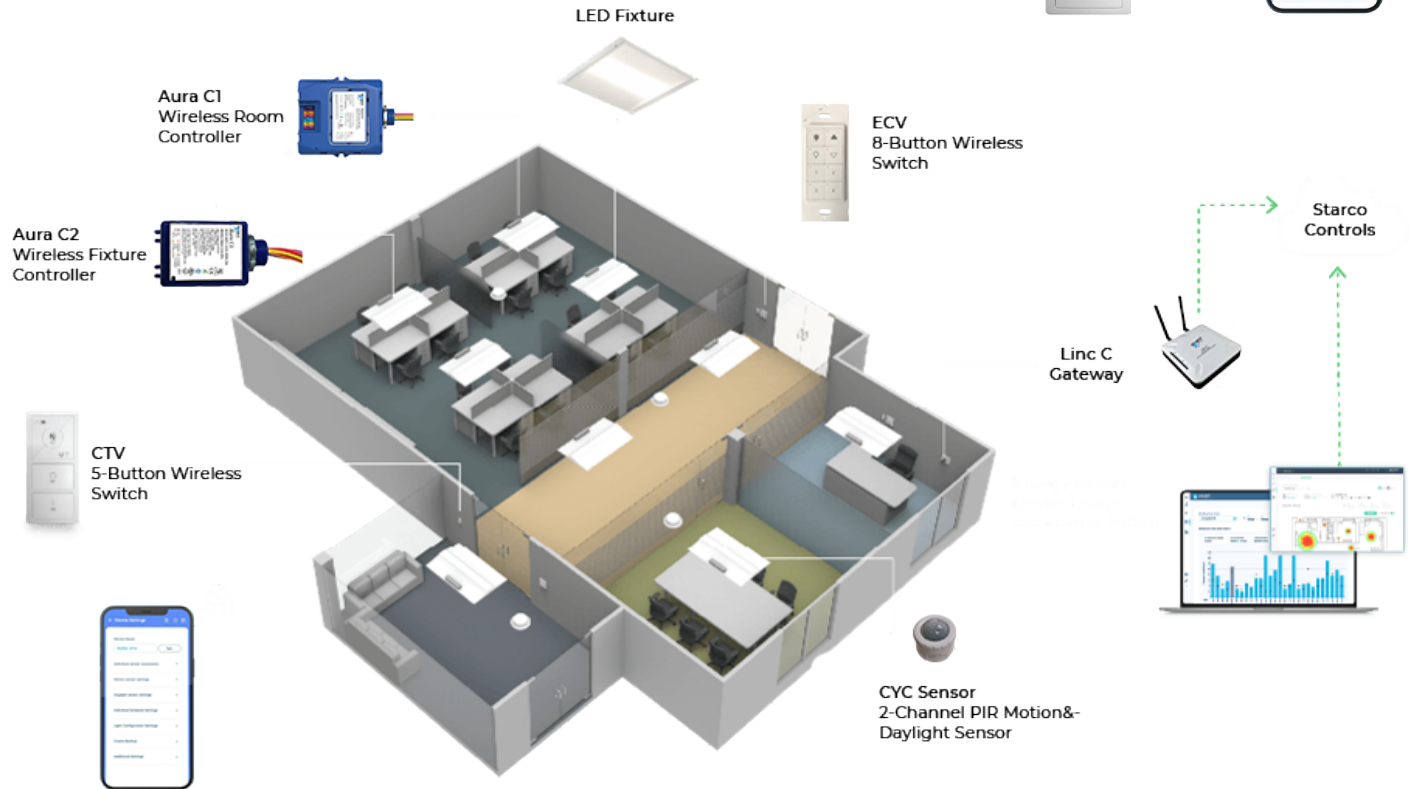
SLLP						
	Size	Wattage	CCT	CRI	Driver	Efficacy
SLLP=LED Panel	14=1x4 22=2x2 24=2x4	15=15W 17=17W 20=20W 25=25W 30=30W 35=35W 40=40W 45=45W 50=50W 55=55W	30=3000K 35=3500K 40=4000K 50=5000K CS=CCT Selectable 3000K/3500K/ 4000K/5000K DR=Dynamic Color Tunable Range 3000K - 5000K	80=80CRI 90=90CRI	SD=Standard Driver Power Selectable, 0-10V Dim TD= Wireless BLE Tunable Driver	SE=Standard Efficacy 130 LPW HE=High Efficacy 150 LPW
Accessories						
<div> <div> Wireless Accessories Sensors CAP=AC powered wireless PIR motion & light sensor CAM=AC powered wireless microwave motion & light sensor CYC=DC powered dual channel PIR motion & light sensor Switches CIV=Wireless 4 button switch CTV=Wireless 5 button switch ECV=Wireless 8 button switch MOV=Wireless 1 button switch with motion sensor OSC=Wireless 1 button switch Gateway & Extenders ECHOC=Beacon & range extender LINCC=Gateway with ethernet & RTC Emergency Inverters EMDW-10=10W Emergency Inverter Wireless Pack EMDW-20=20W Emergency Inverter Wireless Pack </div> <div> Standard Accessories Emergency Inverters EMD-10=10W Emergency Inverter Pack EMD-20=20W Emergency Inverter Pack Dimmers LVDC-A019=Rotary 0-10V Dimmer WMS=Wired 0-10V switch with motion sensor WOS=Wired 0-10V switch Mounts SMK=Surface Mounting Kit DMK=Drywall Mounting Kit </div> </div>						

Emergency Battery Pack Options - Field Installable

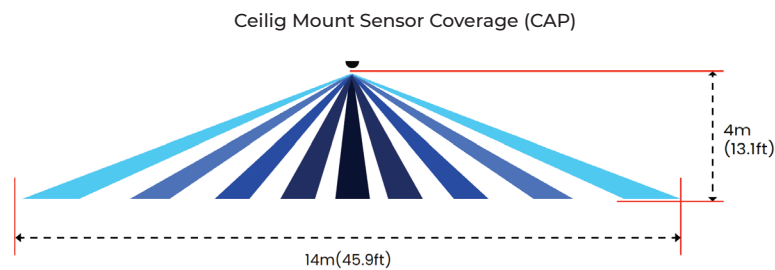
Battery Model Number	Wattage	Runtime(minutes)	Lumen Output	Other
EMD(W)-10	10W	90	1300-1500	Self Diagnostic
EMD(W)-20	20W	90	2600-3000	Self Diagnostic

How does the control platform works?

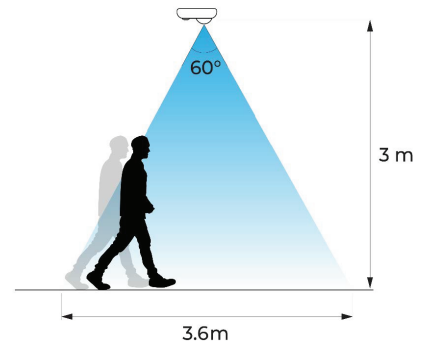
1. Install the SLLP troffers with integrated smart sensor or wireless driver
2. Install the wireless self-powered wall switches
3. With Starco app, pair the troffers with the wall switches and any additional stand-alone sensors
4. Customize the sensor settings and fixture schedules as needed



Sensor Coverage



Fixture Sensor Coverage (CYC)

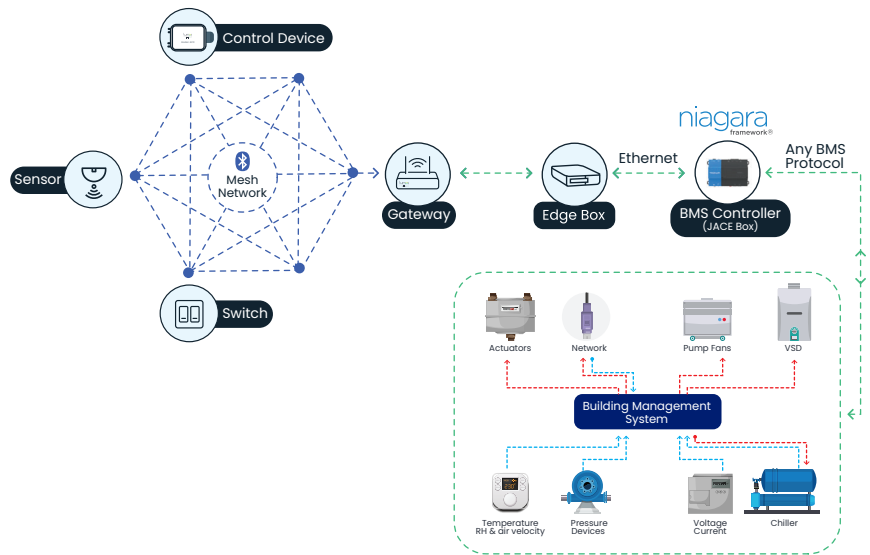


Bluetooth Mesh Features

- **Communication Performance** - Flood management protocols along with optimized communication strategies enable high reliability and performance within the mesh network and to edge interface devices like mobile and web UI.
- **Update Performance** - Unique advertisement based update mechanisms capable of securely updating thousands of devices simultaneously in a couple hours while maintain reliable functionality and performance of the mesh network.
- **Security** - Multi-level security achieved using different keys for device commissioning, communicating within mesh and cloud communication.
- **Time synchronization** - Cloud or real time clock centralized devices provide most cost-effective and reliable time clock management to maintain proper schedules.

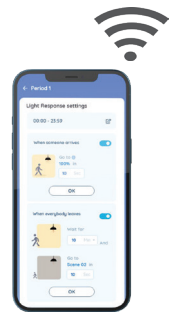
BMS Intergration

- Starco Control ecosystem leverages the Niagara framework to intergrate with any of the 120+ BMS protocols.
- Very simple to connect as plugging the two systems into a common Ethernet network.
- All data can be shared and BMS can monitor and control the lighting system.
- Adding OpendADR gateway, the customer can take advantage of any current or future utility demand response programs including peak pricing, capacity bidding and direct laod control



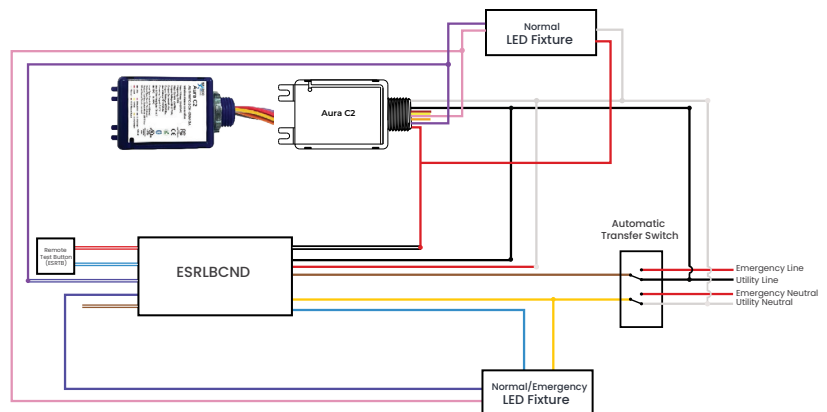
Mobile App

- For commission, configuration and controlling lighting networks including device replacement feature that makes commission easier.
- Setting up schedules, scenes and animations for individual devices or groups or zones
- Always get the latest features and improvements using OTA updates for devices
- Safe and reliable communication with AES 128-bit encryption and ensure safety using 4-digit code



Emergency Lighting Control

- UL924 Listed Aura C1/C2 provides transfer operation during a power outage.
- When there is power outage, the controller will receive power from the emergency source via the ATS. The AC/DC power supply will turn OFF due to power outage and the 0-10V input channel of the controller will not sense any voltage. When the controller detects this, it switches over to Emergency Mode where the fixtures will be lit at 100% intensity for 90 mins.
- The BLE wireless Emergency Inverter interfaces with a battery and LED driver to provide much more than just self-test functionality. It can provide emergency testing reports through the mobile app and also provide fault notifications as soon as one is detect



Radiator AF10 - Wire description

Line (Black)	12VDC (Yellow)	0-10V DIM1+ (Purple)
Neutral (White)	DIM- (Pink)	0-3V Sensor input (Brown)
Load (Red)	0-10V DIM2+ (Orange)	

ESRLBCND - Wire description

Feedback/Dimmer Contacts	Remote Test Input	
NO (White/Violet)	White/Red	Normal Hot (Black)
C (Violet)	White/Blue	Normal Switched Hot (White/Black)
N/C (White/Brown)		Normal Neutral (Red)
		Emergency Neutral (Yellow)
		Emergency Hot (Brown)
		Emergency Hot to Load (Blue)



Standard Efficacy

Model	Wattage	CCT	Size	Lumen Output
SLLP-14-20-30-80-SD-SE	20	3000K	1x4	2470
SLLP-14-20-40-80-SD-SE	20	4000K	1x4	2600
SLLP-14-20-50-80-SD-SE	20	5000K	1x4	2600
SLLP-14-25-30-80-SD-SE	25	3000K	1x4	3087
SLLP-14-25-40-80-SD-SE	25	4000K	1x4	3250
SLLP-14-25-50-80-SD-SE	25	5000K	1x4	3250
SLLP-14-30-30-80-SD-SE	30	3000K	1x4	3420
SLLP-14-30-40-80-SD-SE	30	4000K	1x4	3600
SLLP-14-30-50-80-SD-SE	30	5000K	1x4	3600
SLLP-14-35-30-80-SD-SE	35	3000K	1x4	4322
SLLP-14-35-40-80-SD-SE	35	4000K	1x4	4550
SLLP-14-35-50-80-SD-SE	35	5000K	1x4	4550
SLLP-22-20-30-80-SD-SE	20	3000K	2x2	2470
SLLP-22-20-40-80-SD-SE	20	4000K	2x2	2600
SLLP-22-20-50-80-SD-SE	20	5000K	2x2	2600
SLLP-22-25-30-80-SD-SE	25	3000K	2x2	3087
SLLP-22-25-40-80-SD-SE	25	4000K	2x2	3250
SLLP-22-25-50-80-SD-SE	25	5000K	2x2	3250
SLLP-22-30-30-80-SD-SE	30	3000K	2x2	3420
SLLP-22-30-40-80-SD-SE	30	4000K	2x2	3600
SLLP-22-30-50-80-SD-SE	30	5000K	2x2	3600
SLLP-22-35-30-80-SD-SE	35	3000K	2x2	4322
SLLP-22-35-40-80-SD-SE	35	4000K	2x2	4550
SLLP-22-35-50-80-SD-SE	35	5000K	2x2	4550
SLLP-24-40-30-80-SD-SE	40	3000K	2x4	4940
SLLP-24-40-40-80-SD-SE	40	4000K	2x4	5200
SLLP-24-40-50-80-SD-SE	40	5000K	2x4	5200
SLLP-24-45-30-80-SD-SE	45	3000K	2x4	5557
SLLP-24-45-40-80-SD-SE	45	4000K	2x4	5850
SLLP-24-45-50-80-SD-SE	45	5000K	2x4	5850
SLLP-24-50-30-80-SD-SE	50	3000K	2x4	6175
SLLP-24-50-40-80-SD-SE	50	4000K	2x4	6500
SLLP-24-50-50-80-SD-SE	50	5000K	2x4	6500
SLLP-24-55-30-80-SD-SE	55	3000K	2x4	6792
SLLP-24-55-40-80-SD-SE	55	4000K	2x4	7150
SLLP-24-55-50-80-SD-SE	55	5000K	2x4	7150

High Efficacy

Model	Wattage	CCT	Size	Lumen Output
SLLP-14-20-30-80-SD-HE	20	3000K	1x4	2850
SLLP-14-20-40-80-SD-HE	20	4000K	1x4	3000
SLLP-14-20-50-80-SD-HE	20	5000K	1x4	3000
SLLP-14-25-30-80-SD-HE	25	3000K	1x4	3562
SLLP-14-25-40-80-SD-HE	25	4000K	1x4	3750
SLLP-14-25-50-80-SD-HE	25	5000K	1x4	3750

High Efficacy

SLLP-14-30-30-80-SD-HE	30	3000K	1x4	4275
SLLP-14-30-40-80-SD-HE	30	4000K	1x4	4500
SLLP-14-30-50-80-SD-HE	30	5000K	1x4	4500
SLLP-14-35-30-80-SD-HE	35	3000K	1x4	4987
SLLP-14-35-40-80-SD-HE	35	4000K	1x4	5250
SLLP-14-35-50-80-SD-HE	35	5000K	1x4	5250
SLLP-22-20-30-80-SD-HE	20	3000K	2x2	2850
SLLP-22-20-40-80-SD-HE	20	4000K	2x2	3000
SLLP-22-20-50-80-SD-HE	20	5000K	2x2	3000
SLLP-22-25-30-80-SD-HE	25	3000K	2x2	3562
SLLP-22-25-40-80-SD-HE	25	4000K	2x2	3750
SLLP-22-25-50-80-SD-HE	25	5000K	2x2	3750
SLLP-22-30-30-80-SD-HE	30	3000K	2x2	4275
SLLP-22-30-40-80-SD-HE	30	4000K	2x2	4500
SLLP-22-30-50-80-SD-HE	30	5000K	2x2	4500
SLLP-22-35-30-80-SD-HE	35	3000K	2x2	4987
SLLP-22-35-40-80-SD-HE	35	4000K	2x2	5250
SLLP-22-35-50-80-SD-HE	35	5000K	2x2	5250
SLLP-24-40-30-80-SD-HE	40	3000K	2x4	5700
SLLP-24-40-40-80-SD-HE	40	4000K	2x4	6000
SLLP-24-40-50-80-SD-HE	40	5000K	2x4	6000
SLLP-24-45-30-80-SD-HE	45	3000K	2x4	6412
SLLP-24-45-40-80-SD-HE	45	4000K	2x4	6750
SLLP-24-45-50-80-SD-HE	45	5000K	2x4	6750
SLLP-24-50-30-80-SD-HE	50	3000K	2x4	7125
SLLP-24-50-40-80-SD-HE	50	4000K	2x4	7500
SLLP-24-50-50-80-SD-HE	50	5000K	2x4	7500
SLLP-24-55-30-80-SD-HE	55	3000K	2x4	7837
SLLP-24-55-40-80-SD-HE	55	4000K	2x4	8250
SLLP-24-55-50-80-SD-HE	55	5000K	2x4	8250

INSTALLATION

