

# Sensor Based LED TROFFER LIGHT



Wattages: 14W,17W,20W,28W; 20W,28W,34W,41W



The Sensor Based LED Troffer Lighting Series can be widely used for Indoor Excellent for Offices, Hallways, Multipurpose Rooms, Office Buildings, Conference Rooms, super market, store and many other applications.

Lighting controls meet design lights consortium (DLC) networked lighting control system technical requirements, LLLC, Energy Monitoring and High End Trim function.









### Features:

- · Energy efficient: save up to 80% in energy costs
- · High lumen output
- · Mercury-free
- · Instant-on light
- · 5 years manufacturer warranty
- · Compatible with most Lutron and Leviton dimmers
- · 12Vdc auxiliary dimming
- · The 0-10V Dimming type is continuous

### **Packaging information:**

**\*14TRF14172028W27-5CCT:** 1230MMX307MMX113MM(2Pcs/CTN) (48.43" X12.09" X4.45")

**❖22TRF14172028W27-5CCT**: 620MMX620MMX123MM(2Pcs/CTN) (24.41" X24.41" X4.84" )

**\*24TRF20283441W27-5CCT:** 1230MMX620MMX123MM(2Pcs/CTN) (48.43" X24.41" X4.84")

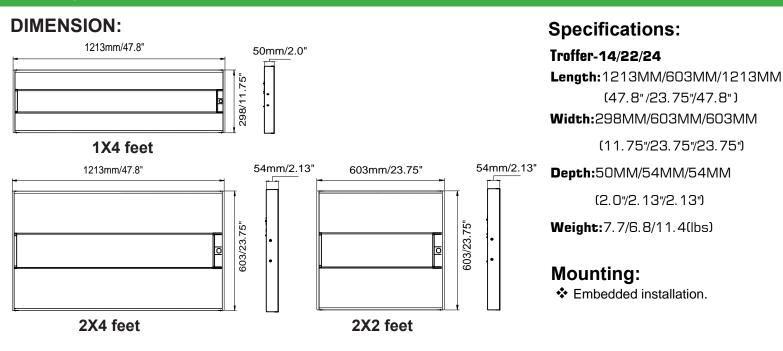
|                       |                               | SPECIFICATION                 |                               |
|-----------------------|-------------------------------|-------------------------------|-------------------------------|
| ТҮРЕ                  | 14TRF14172028W27-5CCT         | 22TRF14172028W27-5CCT         | 24TRF20283441W27-5CCT         |
| WATTAGE               | 14W/17W/20W/28W               | 14W/17W/20W/28W               | 20W/28W/34W/41W               |
| LUMEN                 | 1896 lm/2363 lm/2752lm/3702lm | 1979 lm/2452 lm/2844lm/3845lm | 3390 lm/4629 lm/5375lm/6442lm |
| EFFICACY              | > 140 lm/W                    |                               |                               |
| CCT                   | 3000K,3500K,4000K,5000K,6500K |                               |                               |
| CRI                   | > 80                          |                               |                               |
| INPUT VOLTAGE         | AC120-277V                    |                               |                               |
| LIGHTING ANGLE        | 119°                          |                               |                               |
| FACTORY SETTINGS      | 28W & 4000K                   |                               | 41W & 4000K                   |
| LED TYPE              | SMD2835                       |                               |                               |
| WARRANTY              | 5 year limited                |                               |                               |
| PF                    | > 0.98                        |                               |                               |
| DRIVER EFFICIENCY     | > 90%                         |                               |                               |
| PROTECTION LEVEL      | Damp                          |                               |                               |
| LIFE TIME             | > 50000 hours                 |                               |                               |
| OPERATING TEMPERATURE | -20°C~50°C(-4°F~122°F)        |                               |                               |



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### **CONTROL MODULE:**



## Multiple sensor solutions ready

· Quick and easy in-field installation of sensors.



· Integrated occupancy and daylight controls.



Receptacle

The sensor receptacle is pre-embedded in the profile frame.



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### **ACCESSORIES: (SOLD SEPARATELY)**



SB-EML08W27-XX SB-EML15W27-XX SB-EML20W27-XX 8W/15W/20W Emergency Backup Battery LED Driver



6FTPRWG-3/8-3PIN 6FTPRWG-3/8-5PIN 6FTPRWG-3/8-6PIN 6FT 3/8 inch Metal Flexible Conduit

### **CONTROL (SOLD SEPARATELY)**



Bluetooth° NLC-BT-PIR-SR-001 PIR Bluetooth Microwave Sensor For Silvair Systems (Silvair Bluetooth)



Bluetooth® NLC-BT-PIR-GE-001 PIR Bluetooth Microwave Sensor For **GEBC Systems** (GEBC Bluetooth)



NLC-PIR-SQ-001 Bi-Level PIR Infrared Sensor



RC100 (With NL C-PIR-SQ-001 use) Remote Controller



**BRI-WS204-GE** 4-Button Wireless Wall Switch (Can only be used for NLC-BT-PIR-GE-001)

### **ACCESSORIES**: (ACCESSORIES NEED TO PURCHASED SEPARATELY)



SB-TF22FRAME-W 2X2 feet SURFACE MOUNT KIT



SB-TF24FRAME-W 2X4 feet SURFACE MOUNT KIT



SB-TF14FRAME-W 1X4 feet SURFACE MOUNT KIT



# Sensor Based LED TROFFER LIGHT

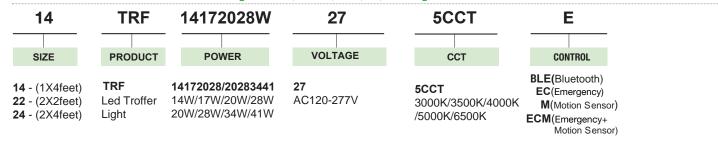


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### ORDERING INFORMATION:

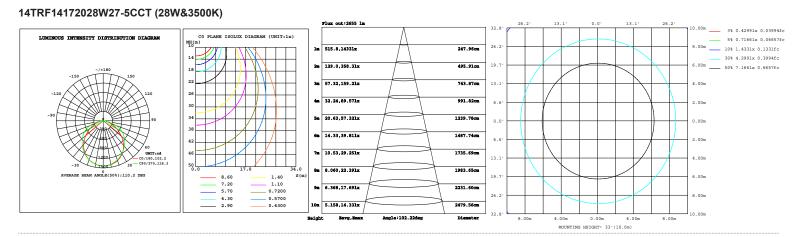
### **EXAMPLE:**

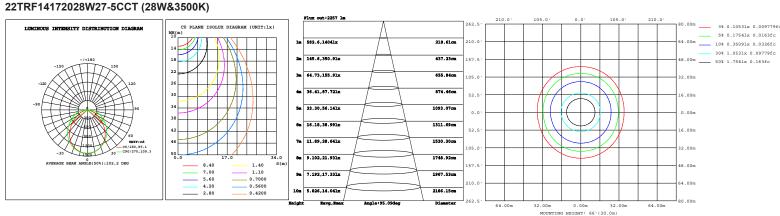
### 14TRF14172028W27-5CCT-E[Blank,BLE,EC,M,ECM]

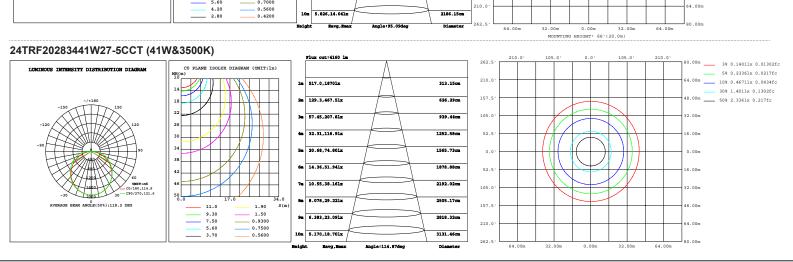


### **PHOTOMETRICS:**

### For complete IES files, please visit our website.









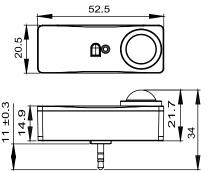
# Sensor Based LED TROFFER LIGHT



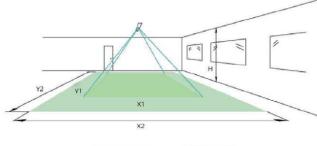
## Wattages: 14W,17W,20W,28W; 20W,28W,34W,41W



### **DIMENSION**



#### **COVERAGE**







| Height  | Minor Movement |          | Major Movement |          |
|---------|----------------|----------|----------------|----------|
| Н       | Y1             | X1       | Y2             | X2       |
| 8'/2.4m | 10'/2.9m       | 9'/2.7m  | 15'/4.5m       | 9'/2.9m  |
| 10'/3m  | 12'/3.6m       | 11'/3.4m | 18'/5.4m       | 12'/3.6m |

Note: Longer dimension of detection area (Y1, Y2) is parallel to longer dimension.

# NLC-BT-PIR-SR-001

Plug and Play Network BLE Nodes and Sensor

The NLC-BT-PIR-SR-001 uses PIR motion detectorarchitecture and passive infrared (PIR) technology for improved detection coverage for high bay applications.

### **FEATURES**

- Bluetooth to 0-10V signal converter, Bluetooth mesh network.
- Built-in 20mA 0-10V signal output.
- · Mesh network, which has a much longer control distance, transmits received signals to neighboring devices.
- All devices on 0-10V line are broadcastcontrolled by mobile application
- In typical outdoor environment, the typical range for wireless communication is 60m.
- · Actual range is dependent on field installation.
- Available with Magnetic reset (Touch the top part of sensorfor 5 seconds).
- · On-board antenna.

|                         | ODEOLEIO ATION                     |  |  |  |
|-------------------------|------------------------------------|--|--|--|
| SPECIFICATION           |                                    |  |  |  |
| NETWORK BLE MESH        | Yes                                |  |  |  |
| DAYLIGHT HARVESTING     | Yes                                |  |  |  |
| MICROWAVE MOTION SENSOR | Yes                                |  |  |  |
| MOTION SENSOR           | Passive infrared sensor            |  |  |  |
| OPERATING VOLTAGE       | 10-14V DC                          |  |  |  |
| OPERATING CURRENT       | >50mA                              |  |  |  |
| SINKING CURRENT         | max. 25mA                          |  |  |  |
| CONTROL OUTPUT          | 0-10V                              |  |  |  |
| RADIO FREQUENCY         | 2.4GHz ± 75MHz                     |  |  |  |
| DETECTION ANGLE         | 360 °                              |  |  |  |
| PRORGRAMMING            | Silvair iOS App ( IOS or Android ) |  |  |  |
| CYBERSECURITY           | UL                                 |  |  |  |
| MOUNTING HEIGHT         | 12ft Max.                          |  |  |  |
| MAX BLUETOOTH RANGE     | 200ft                              |  |  |  |
| SAFETY                  | cULus Listed                       |  |  |  |
| FCC                     | FCC                                |  |  |  |
| OPERATING TEMP.         | -20°C - +60°C                      |  |  |  |
| IP RATING               | IP20                               |  |  |  |
| WARRANTY                | 5 year limited                     |  |  |  |

### **COMMISSIONING**

Silvair iOS App or Android makes it easy to pair devices, create groups, set scenes/schedules, customize dimming levels, and adjust high trim based on application needs.

Please scan and

download the app:



**Operation Instruction:** 

https://youtu.be/8KWPK7z\_Tng

#### Android:

When using silvair, you can search for silvair in Android Google play to download and install it

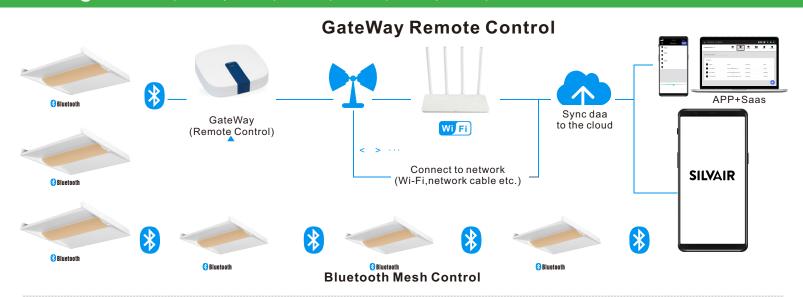
iOS



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#### **Functions:**

The Silvair Gateway enables the following functions in the Silvair web app: • Scheduling (available by default)

- Scheduling changes in scenes and lighting control scenarios (for example occupancy sensing,daylight harvesting) for specific times or days.
- Energyand occupancy monitoring (additional paid service)
  - oVisualizing energy use and occupancy via the Silvair web app.
  - Downloading energy and occupancy via the Silvair web app and cloud-based API.
- Remote monitoring and control (additional paid service)
  - o Low-latency monitoring of the status of devices in the network via API.
- $\circ$  Low-latency control of devices in the network via API.  $\bullet$  System diagnostics
  - $\circ$  Monitoring of the status of Bluetooth mesh networks.
  - o Remote troubleshooting of networking issues.

#### Features:

- •Future-proof Linux operating system.
- Simple commissioning using the Silvair Commissioning tools.
- Automatic connection to the Silvair cloud.
- Secure provisioning with secure IDs and encrypted keys.
- High level of hardware and software security (secure boot and encrypted file system can only be accessed with the management platform).
- Automatic security updates.
- Prompt releases of OS updates and fixes to vulnerabilities.
- Low-latency transfer of network, luminaire, and sensor status data to the Silvair cloud.
- Schedule caching.
- Automatic remote firmware updates.
- Display of gateway and network performance metrics (requires the Silvair web app).

### **INDUSTRIAL GATEWAY**

#### **SGW-101**

**Smart Engineering Gateway** 

The Silvair Gateway connects Bluetooth mesh networks that have been commissioned using the Silvair Commissioning tools to the Silvair cloud. This allows the scheduling of events and delivery of services based on the data generated by these networks.

| SPECIFICATION                   |  |  |  |
|---------------------------------|--|--|--|
| POWER SUPPLY                    | 4.5–5.5 V DC, 2 A<br>Power over Ethernet 36–57 V DC (IEEE 802.3af)   |  |  |
| OPERATING SYSTEM                | Ubuntu Core  |  |  |
| PROCESSOR                       | i.MX6ULL (Y2), 32-bit ARM 800 MHz  |  |  |
| MEMORY                          | 512 MB DDR3L SDRAM 8GB eMMC  |  |  |
| COMMUNICATION PROTOCOLS         | Bluetooth mesh (2.4 GHz Bluetooth Low Energy)<br>Wi-Fi 802.11a/b/g/n/ac (2.4/5 GHz)<br>4G LTE Cat 1 with 2G/3G (only for<br>Cascade-500-W and Cascade-500-X gateways)                |  |  |
| PORTS                           | 1 x RJ45 10/100 Ethernet<br>1 x USB 2.0 Type-A<br>2 x external dipole antenna, 5 dBi (only for<br>Cascade-500-W and Cascade-500-X gateways)  |  |  |
| REQUIRED AMBIENT<br>TEMPERATURE | 0°C to 60°C<br>32°F to 140°F   |  |  |
| ENCLOSURE DIMENSIONS            | 127 mm x 127 mm x 30 mm<br>(5 inch x 5 inch x 1.2 inch)  |  |  |
| MOUNTING POSITION               | Wall or surface mounted. As close to the geometrical center of the lighting network as possible, but as far as possible from potential sources of interference.                      |  |  |
| SECURITY                        | Secure boot with encrypted operating system<br>Secure communication with the Silvair Cloud<br>over Internet (TLS) Secure communication<br>with devices over qualified Bluetooth mesh |  |  |