









Product Briefing



| S.No | Item | Page No. |
|-------------|---|-----------------|
| 1 | LiPHY Adapter Series for Constant Current Drivers  | 3 |
| 2 | LiPHY Downlight LED Panel with Driver  | 5 |
| 3 | LiPHY LED LightBox  | 6 |
| 4 | LiPHY GOBO Projector  | 7 |
| 5 | LiPHY AC Bulb  | 8 |
| 6 | LiPHY USB Bulb  | 9 |

LiPHY Adapter Series for Constant Current Drivers

Features

- ◆ Wide DC input voltage and current range to support a wide category of LED Drivers
- ◆ Compatible with CC LED Drivers
- ◆ Easy installation through insertion between Driver and LED
- ◆ Wireless control through custom smartphone application or SDK
- ◆ Supports dimming control for CC drivers
- ◆ 1 year warranty



S

| Electrical and Mechanical Specifications | | | |
|--|---|----------------------|---|
| Input Voltage Range* | DC 12–50 V | Input Current Range | DC 0–3 A |
| Output Voltage Range* | DC 12–50 V | Output Current Range | DC 0–3 A |
| Operating Temperature | –10 to 40 °C | Dimensions | L * W * H: 62 mm * 32 mm * 26 mm |
| Weight | 45 gm | | |
| CC Driver Compatibility Guide | | | |
| The CC driver's maximum power rating must be at least 25% higher than the LED's power consumption. As an example, a quick reference table is shown below | | | |
| LED Power Consumption | CC Driver Max Rating Required for LiPHY | | |
| 10 W | 12.5 W (CC 0.3 A, 42 V Max) | | |
| 10 W | 12.5 W (CC 0.7 A, 18 V Max) | | |
| 20 W | 25 W (CC 0.7 A, 36 V Max) | | |
| 20 W | 25 W (CC 1.4 A, 18 V Max) | | |
| 30 W | 37.5 W (CC 0.7 A, 54 V Max) | | |
| 30 W | 37.5 W (CC 1.4 A, 27 V Max) | | |
| 40 W | 50 W (CC 1.0 A, 50 V Max) | | |
| 40 W | 50 W (CC 2.0 A, 25 V Max) | | |
| RF Specifications | | | |
| RF Standard | BLE 4.0 | Advertisement Mode | iBeacon |
| TX Power | 0 dBm | Wireless Range | Up to 10 meter |
| Broadcast Interval | 1–10 times/s | | |
| LiPHY Control | | | |
| Programmability | via Smartphone App | Cloud Based CMS | Included |
| Password Protection | Yes | Dimming Support # | Min. dimming level determines the max. LiPHY detection distance |
| Firmware update | Over the air (OTA) supported | Detection Range ^ | Light source dependent |
| Applications | | | |
| Downlight, Spotlight, Ceiling Light, Table Lamp, Lightbox, LED signboard | | | |

* This range is the total supported range by all the products of the same category. For breakdown between each model, see the products description below.

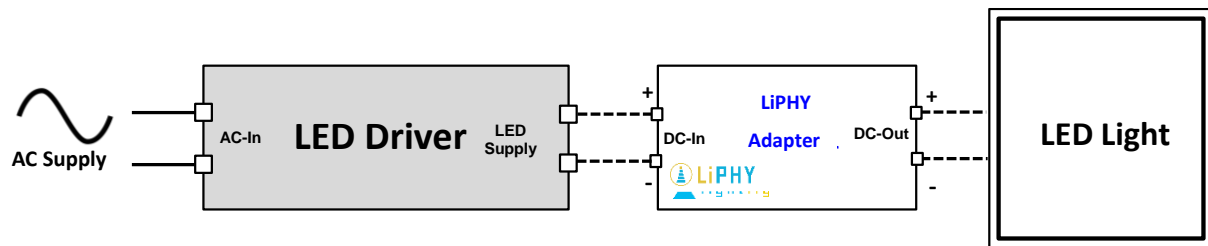
Dimming support ONLY for constant current (CC) drivers with built-in 0-10V analog dimmer. PWM and TRIAC dimmer are not supported.

^ Detection range and sensitivity depends on the intensity, size & dimensions of light and may vary depending on the type of light.

Product Range

| Series | Model | Input / Output Voltage | Input / Output Current | Max Power |
|-------------|------------|------------------------|------------------------|-----------|
| LiPHY CC | LP025020E1 | 12-25 V | 0 – 2A | 50 W |
| | LP050020E2 | 25-50 V | 0 – 2A | 100 W |

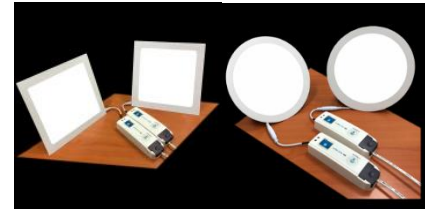
Hardware Application Diagram



LiPHY Downlight LED Panel with Driver

Features

- ◆ An integrated solution of LiPHY features in downlights
- ◆ Constant current (CC) driven 18 Watt downlight panels
- ◆ Wireless control through custom smartphone application or SDK
- ◆ Round and Square shaped Panel Light
- ◆ Protection: short circuit and over load protection
- ◆ 1 year warranty



| LED Panel - Electrical and Mechanical Specifications | | | |
|--|---|--------------------|----------------------------------|
| Rated Power | 18 watt | Input Current | 300mA |
| Optical Output | 1500lm @ 6000 K | Dimension | 220 mm x 220 mm |
| Light Panel Area | 175 mm x 175 mm | | |
| Driver - Electrical and Mechanical Specifications | | | |
| Input Voltage Range | AC 100-277 V 50/60 Hz | Power Factor | > 0.9 |
| Output Voltage Range | DC 50-60 V | Output Current | 300 mA |
| Operating Temperature | -10 to 40 °C | Dimensions | L * W * H: 71 mm * 50 mm * 34 mm |
| RF Specifications | | | |
| RF Standard | BLE 4.0 | Advertisement Mode | iBeacon |
| TX Power | 0 dBm | Wireless Range | Up to 10 meters |
| Broadcast Interval | 1-10 times/s | | |
| LiPHY Control | | | |
| Programmability | On the fly ID update via Smartphone App | Cloud Based CMS | Available |
| Password Protection | Yes | Firmware update | Over the air (OTA) supported |
| Applications | | | |
| Ceiling panel lamps for indoor lighting to enable indoor positioning and location based content delivery | | | |

LiPHY LED LightBox

Features

- ◆ An integration solution of LiPHY feature in LED LightBox
- ◆ Wireless control through custom smartphone application or SDK
- ◆ Customization of Graphics and shape of lightbox possible.
- ◆ USB cable connection
- ◆ Used in conjunction with LiPHY adapter
- ◆ 1 year warranty



| Electrical and Mechanical Specifications | | | |
|--|---|---------------------------|---------------------------------|
| Power Consumption | 3.5 watt (Maximum) | Weight | 0.5 kg (Maximum) |
| Illuminance | 3900 LX | Overall Dimension | L*W *H: 200 mm * 200 mm * 4- mm |
| Color Temperature | 6500K | Wire Length | 1 meter (Minimum) |
| RF Specifications | | | |
| RF Standard | BLE 4.0 | Advertisement Mode | iBeacon |
| TX Power | 0 dBm | Wireless Range | Up to 10 meters |
| Broadcast Interval | 1-10 times/s | | |
| LiPHY Control | | | |
| Programmability | On the fly ID update via Smartphone App | Cloud Based CMS | Available |
| Password Protection | Yes | Firmware update | Over the air (OTA) supported |

LiPHY GOBO Projector

Features

- ◆ An integration solution of LiPHY feature in GOBO Projector
- ◆ Includes 1 custom design slide (With maximum two color design)
- ◆ The LiPHY adapter module is integrated inside the Projector.
- ◆ It is used to turn the projection into a smart projection or information channel.
- ◆ LiPHY powered GOBO Projector is used for outdoor advertising and content extraction.
- ◆ Installation - Need to be mounted on the ceiling and can be projected on the floor or wall.



| Electrical and Mechanical Specifications | | | |
|--|---------------------------|--------------------|------------------------------|
| Power Consumption | 25 watt (Maximum) | Rated Voltage | AC 220V |
| IP Rating | IP 65 | Weight | 1 kg (Maximum) |
| Material | Aluminum Alloy | Wire Length | 1 meter (Minimum) |
| RF Specifications | | | |
| RF Standard | BLE 4.0 | Advertisement Mode | iBeacon |
| TX Power | 0 dBm | Wireless Range | Up to 10 meters |
| Broadcast Interval | 1-10 times/s | Detection Range | > 2meter |
| LiPHY Control | | | |
| Programmability | Update via Smartphone App | Cloud Based CMS | Available |
| Password Protection | Yes | Firmware update | Over the air (OTA) supported |

LIPHY AC Bulb

Features

- ◆ An integrated solution of LiPHY features in Bulb
- ◆ With E27 screw base.
- ◆ Wireless control through custom smartphone application or SDK
- ◆ Packaged with holder and extender
- ◆ 1 year warranty



| Electrical and Mechanical Specifications | | | |
|---|---|--|------------------------------|
| Input AC | 220 V | Maximum Power | 5 Watts |
| Maximum Lumen Output | 400 lm @ 6000 K | Bulb Diameter | 55 mm |
| Weight | 0.1 kgs | Weight with holder and extender | Less than 1 kg |
| RF Specifications | | | |
| RF Standard | BLE 4.0 | Advertisement Mode | iBeacon |
| TX Power | 0 dBm | Wireless Range | Up to 10 meters |
| Broadcast Interval | 1-10 times/s | | |
| LiPHY Control | | | |
| Programmability | On the fly ID update via Smartphone App | Cloud Based CMS | Available |
| Password Protection | Yes | Firmware update | Over the air (OTA) supported |
| Applications | | | |
| To be used in standard E27 lightbulb socket | | | |

LiPHY USB Bulb

Features

- ◆ Ideal for LiPHY development and evaluation
- ◆ Portable design based on USB plug
- ◆ Low power (1W) compatible with standard power-banks
- ◆ Wireless control through custom smartphone application or SDK
- ◆ 1 year warranty



| Electrical and Mechanical Specifications | | | |
|---|---|--------------------|----------------------|
| Input Voltage | 5 V | Current | < 200mA |
| Luminance | ~150 lm | Bulb diameter | 4.5 cm |
| Operating Temperature | -10 to 40 °C | | |
| RF Specifications | | | |
| RF Standard | BLE 4.0 | Advertisement Mode | iBeacon |
| TX Power | 0 dBm | Wireless Range | Up to 10 meters |
| Broadcast Interval | 1-10 times/s | | |
| LiPHY Control | | | |
| Programmability | On the fly ID update via Smartphone App | Cloud Based CMS | Available |
| Password Protection | Yes | Dimming Control | 25-100% |
| Firmware update | Over the air (OTA) supported | Detection Range | Up to 30 centimeters |
| Applications | | | |
| To be used as a portable light for LiPHY application development and demonstration. | | | |