

POWERGEAR[®]

Version: 4.01

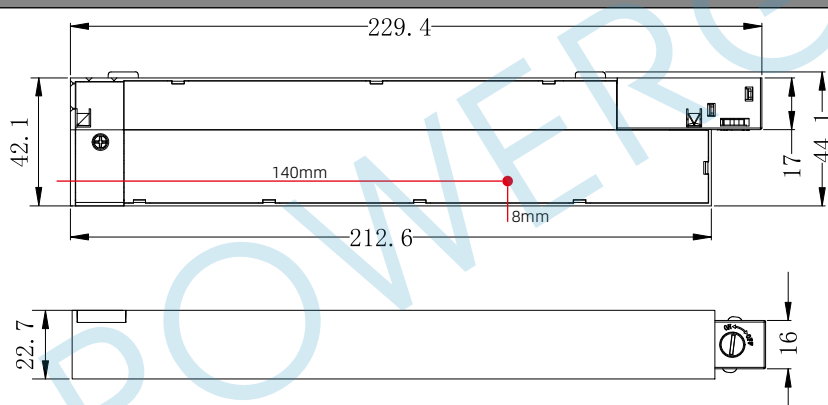
Datasheet I 48V 200W constant voltage power feed with Casambi to DALI



Picture for reference only

Product code	PRO-PS200WB
Color	Black / White
Color code	RAL 9005/9016
Main materials	PC UL94V0+Copper
Inner package QTY	1 pcs
Unit weight	275 g
Outer package QTY	24 pcs
Gross weight	7.35 Kg
Package size	250*220*210mm
Voltage & Max.load	100~120Vac,& 220~240Vac, 50/60Hz

Dimensions



Features:

- 1.Implement GaN Mosfet
- 2.High efficiency > 94%,reduce heat loss > 15%
- 3.High switching frequency,high power density, ultra compact size
- 4.Adopting a digital control chip with fault reading function.
- 5.Casambi to DALI dimming module inside

Notes:

Applied to POWERGEAR 48V low voltage track system only.

Max units per circuit breaker:
B10:5 B16:8 C10:8 C16:14

CASAMBI

Specification

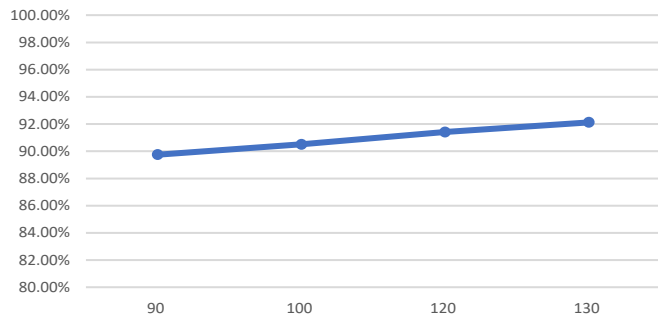
Voltage(Uin)	Nominal Voltage:100~120Vac & 220~240Vac; AC Voltage:90-132Vac &198-264Vac
Current(Iin)	1300mA Max. @Full Load, 100Vac,1000mA Max. @Full Load, 220Vac
THD	< 5%, @Full Load, 100Vac & 230Vac 50/60Hz
Power factor	≥0.95, @Full Load, 120Vac & 230Vac 50/60Hz
Efficiency	91% @Full Load 120Vac & 94% @ Full Load 230Vac
Inrush current	< 60A (50% Ipeak, twidth=250us@AC230V)
Voltage(Uout)	48Vdc ±5%
Current(Iout)	4170mA Max. ±5% @220-240Vac,2500mA Max. ±5% @100-120Vac
Power(Pout)	200W @220-240Vac,120W @100-120Vac
Standards	EMC:EN61347-2-13 EN55015
Ta / Tc:	-20°C...35°C / 80°C
Surge:	L / N 1Kv acc to. EN61547 Clause 5.7
Protection	Short-circuit, Open-circuit, Overvoltage
Expected Lifetime	50,000 hours @ Tc 80°C

Voltage Ripple 200mV
(<1000Hz, ripple/average)

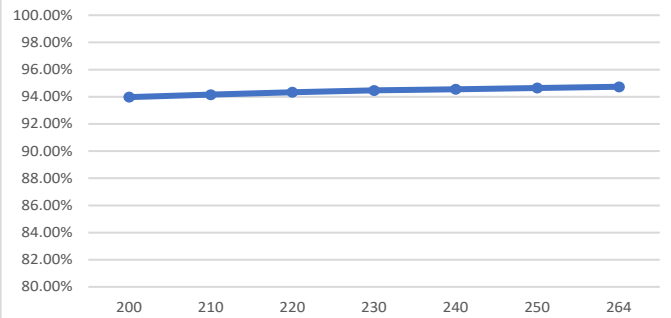


Driver Typical Specification

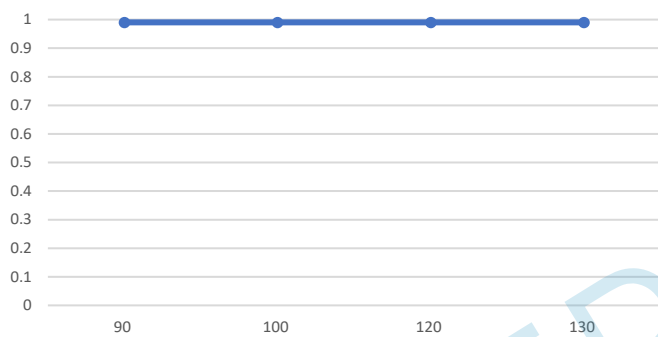
EFF VS Uin (@48V 120W)



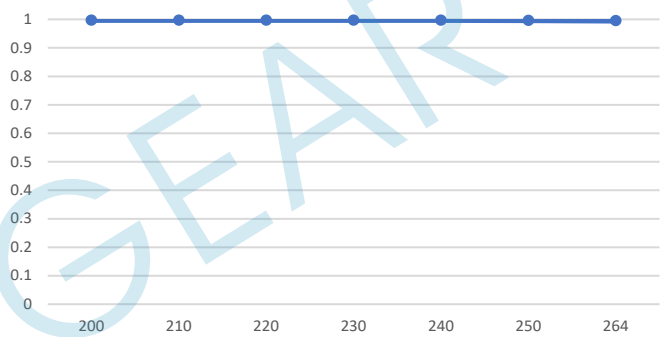
EFF VS Uin (@48V 200W)



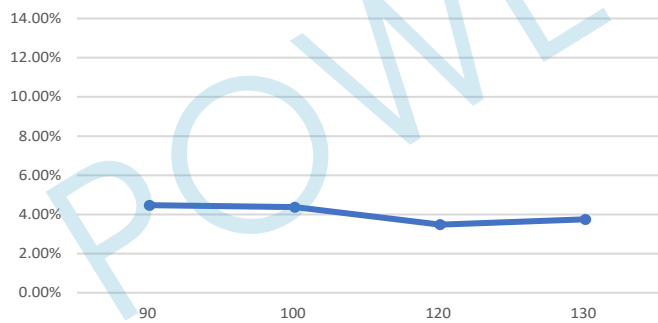
PF VS Uin (@48V 120W)



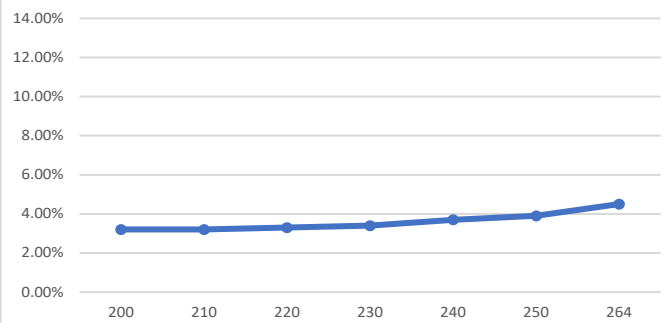
PF VS Uin (@48V 200W)



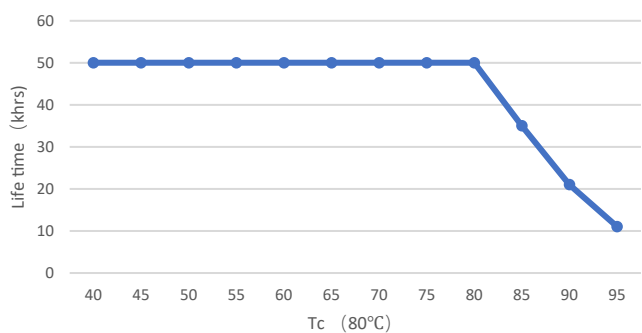
THD VS Uin (@48V 120W)



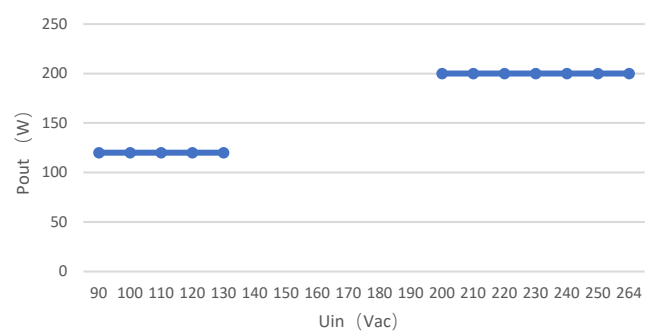
THD VS Uin (@48V 200W)



Life time VS Tc

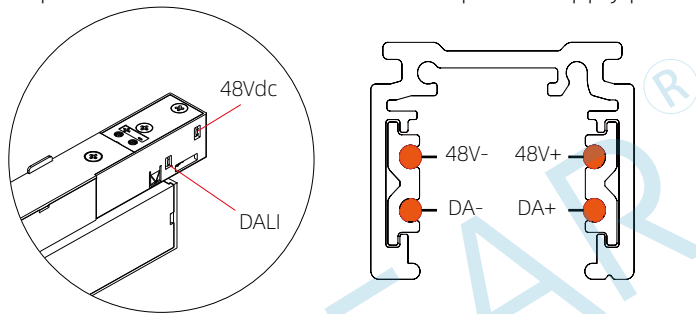


Static characteristic (@48V 120W & 200W)



CASAMBI Function & Setting

- 1, This product is equipped with a built-in Casambi wireless module, which connects to each other through the 2.4GHz Bluetooth Mesh to the Casambi App. It is recommended that the communication distance between the product and the mobile phone should not exceed 25 meters.
- 2, This product can convert Casambi wireless control signals into DALI dimming signals, and meet for DALI 2 there is an DALI power supply that complies with SELV standards. The DALI power supply parameters are: 16Vdc, 50mA Max.



- 3, The maximum quantity of DALI lights can be carried 8PCS. In actual use, the power redundancy of the driver should be considered (Note: The final quantity of lights is calculated as follows)

Example: When the input voltage is 220-240V, the maximum output power is 200W, which is calculated at 85% design redundancy.

①, All DALI lamps power is 6W, Min ($200W \times 0.85 / 6W = 28, 8$), the Max. quantity of carrying lights are 8PCS.

②, All DALI lamps power is 22W, Min ($200W \times 0.85 / 22W = 7, 8$), the Max. quantity of carrying lights are 7PCS.

- 4, iOS users can search for "casambi" through the App Store and download it, while Android users can download through website <https://app.casambi.com/app>

CASAMBI

- 5, Before setting up, please turn on the Bluetooth function on your phone. Users can choose the right DALI fixture through the "change profile" (① DALI broadcast/② DALI broadcast TW/③ DALI addressable, and follow the instructions below.

Open Casambi App

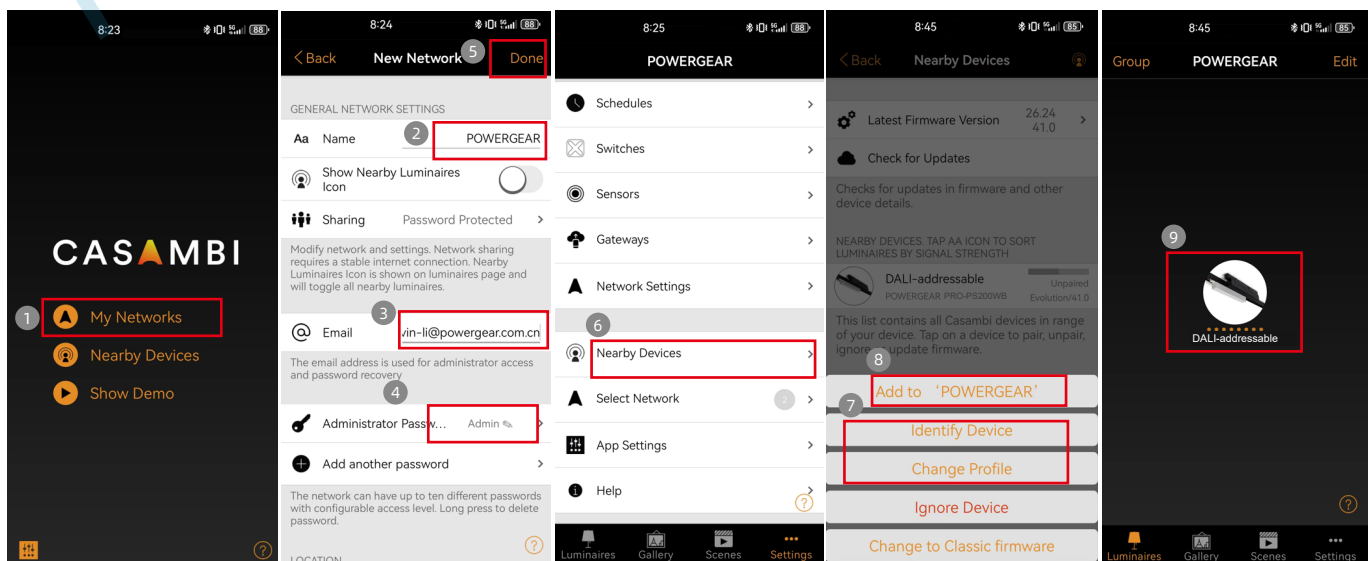
①, Click on "My Networks".

②-⑤, Create a new network, and set the name/email/password etc.

⑥-⑦, Find the nearby devices, identify device, add to your network.

⑧, After completion, you can proceed with daily operations.

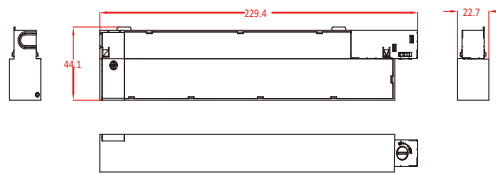
"Picture for reference only"



Installation please read carefully before installing



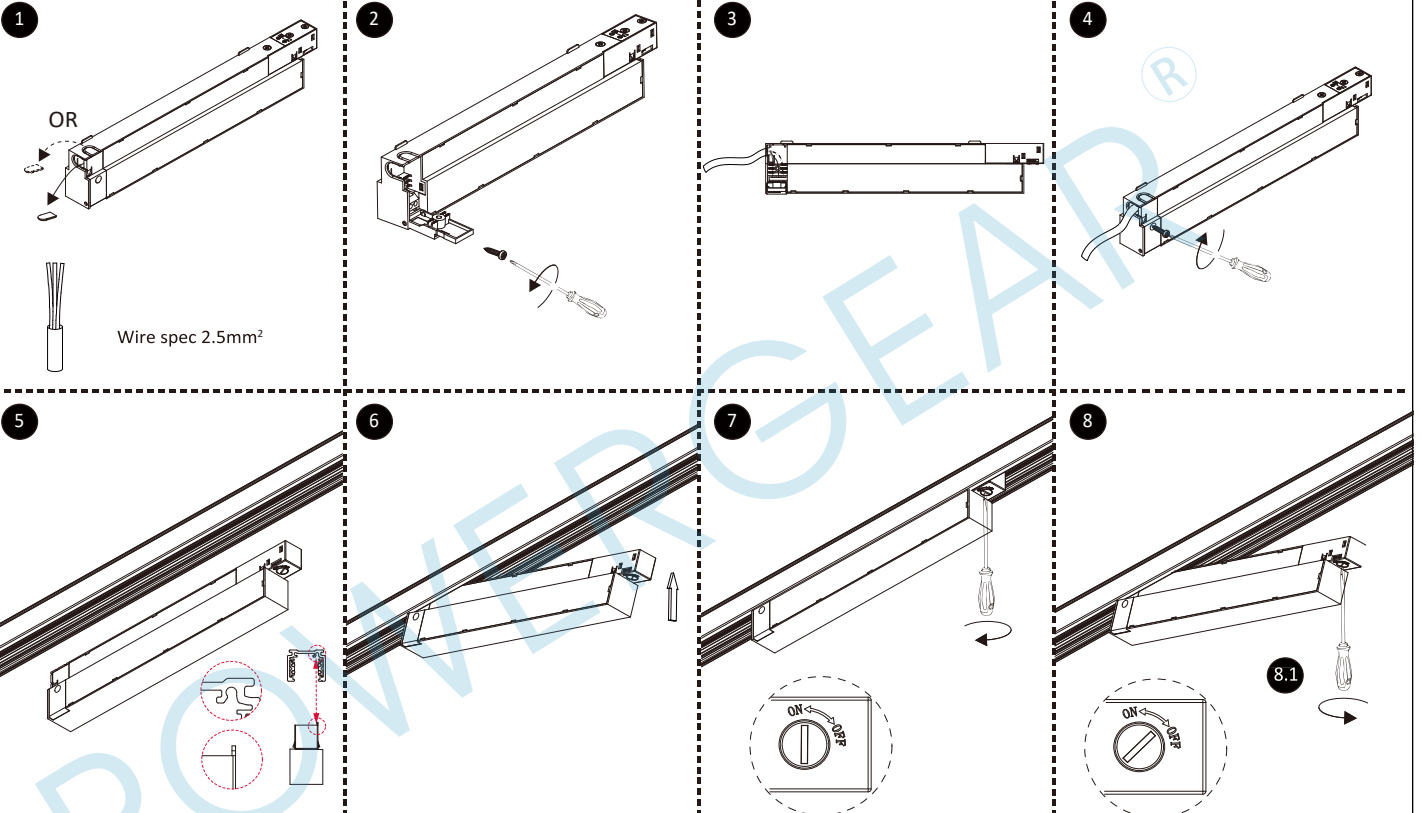
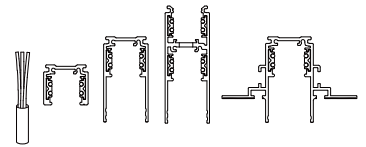
Product dimension:



Tools:



Compatibility:



Troubleshooting

1. Can not be installed into the track: please note that step 5 has direction restrictions.
2. No electricity: please make sure step 3 wiring correct/firm, and switch to "ON" after step 7.

Disclaimer

1. It is forbidden to apply paint, glue, etc. to this product.
2. It is recommended to use POWERGEAR track system or the promised brand track.
3. This product is suitable for indoors, not outdoors. Due to differences in product components, please do not use the output in parallel for a long time, which may cause damage.
4. This product has passed the safety and electromagnetic compatibility certification, because the margin of electromagnetic compatibility is related to the length of the lamp wire and the wiring method, please reconfirm before use.
5. If the structure or wiring of this product is not used/modified according to the instructions, resulting in damage to this product or related products, POWERGEAR doesn't continue to maintain the after-sales commitment.
6. Product optimization and version upgrade will not be prior noticed. Please refer to the actual product received. If you have any questions, please contact our sales staff in time.
7. POWERGEAR reserves the right of final interpretation of this product.

Notes:

1. The LED driver relies upon the luminaire enclosure for protection against accidental contact with live parts.
2. The LED driver is used for track system mounted on ceiling.
3. The components are unsuitable for the connection of inductive loads.
4. It is the user's responsibility to ensure electrical, mechanical and thermal compatibility between the track system and luminaires attached to it.

