

LF-GHY150H48-SP

LF-GHY150H48-SP SELV C.V. Output with 3.13A Max. | Constant Voltage - Non Dimmable



Product family features

- High efficiency, high PF, low THD
- SELV output
- Flicker free
- 5 years guarantee



Product family benefits

- High efficiency
- Flicker free
- Long lifetime and high reliability
- SELV output

Typical applications

- For LED strips
- For office, commercial and decorative lighting

Product parameters

- | | |
|----------------------------|----------------------|
| — Output current 0-3.13A | — Output voltage 48V |
| — Output power 0-150W | — Efficiency 94% |
| — Input voltage 198-264Vac | |

Electrical data

Input data

| | |
|---|--------------------------|
| Rated input voltage | 220... 240V |
| Input voltage AC | 198 ... 264V |
| Mains frequency | 0/50/60Hz |
| Input voltage DC | 220...240V ¹⁾ |
| Power factor | ≥0.95 ²⁾ |
| Efficiency | ≥94% |
| THD | ≤10% |
| Input current | 0.85A Max |
| Inrush current | 65A ³⁾ |
| Loading no. on circuit breaker 10 A (B) | 3 |
| Loading no. on circuit breaker 10 A (C) | 6 |
| Loading no. on circuit breaker 16 A (B) | 6 |
| Loading no. on circuit breaker 16 A (C) | 10 |

Output data

| | |
|------------------------|---------------------------------|
| Nominal output voltage | 48V ⁴⁾ |
| Nominal output current | 0...3.13A |
| Maximum output power | 150W |
| Nominal output power | 0...150W |
| Flicker | According to IEEE Std 1789-2015 |
| CIE SVM | ≤0.4 |
| IEC-Pst | ≤1 |
| Current tolerance | / |
| Ripple voltage | 1000mV Max |
| Voltage tolerance | ±2% |
| No-load voltage | 49V Max |
| Start-up time | <0.5S |

Safety

| | |
|-------------------------------|-------------------------|
| Withstanding voltage | I/P-O/P: 3.75kV&5mA&60S |
| Surge capability (L-N) | 2 kV |
| Surge capability (L/N-Ground) | - |
| Insulation resistance | I/P-O/P: > 100MΩ@500VDC |

Guarantee 5 years⁵⁾

1) DC input is only for emergency, limited input voltage range: 180-264V

2) Power ≥ 80W

3) t = 300μs

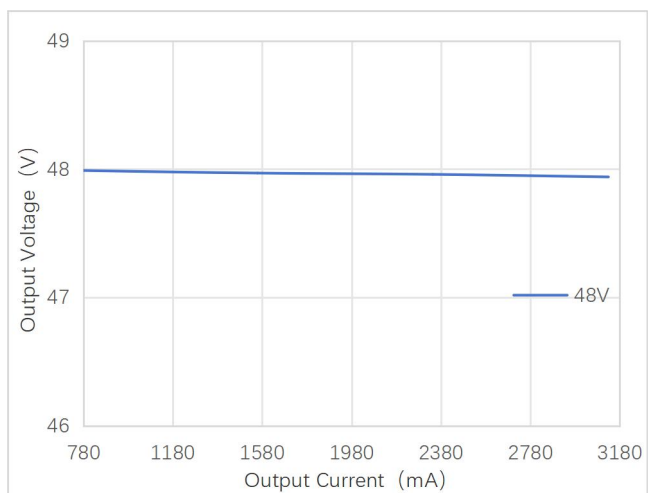
4) Please refer to the operating window for the relationship between the output voltage and current

5) 5 years@Tc≤85℃

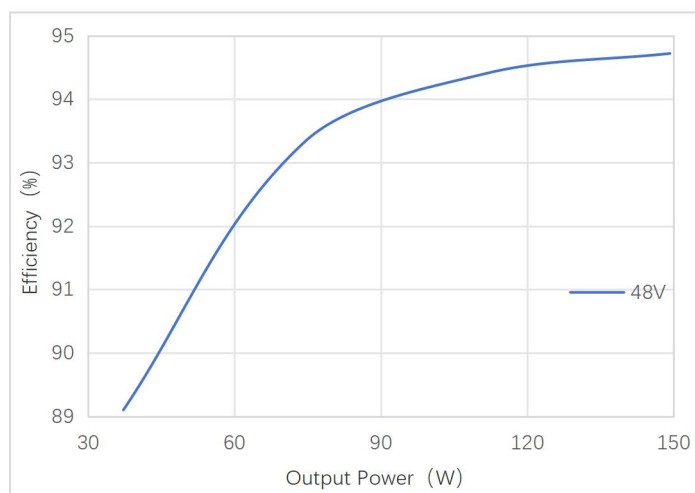
6) The product fails to meet the single harmonic requirements of the EN61000-3-2 standard when the load is below 30%

Characteristic diagrams

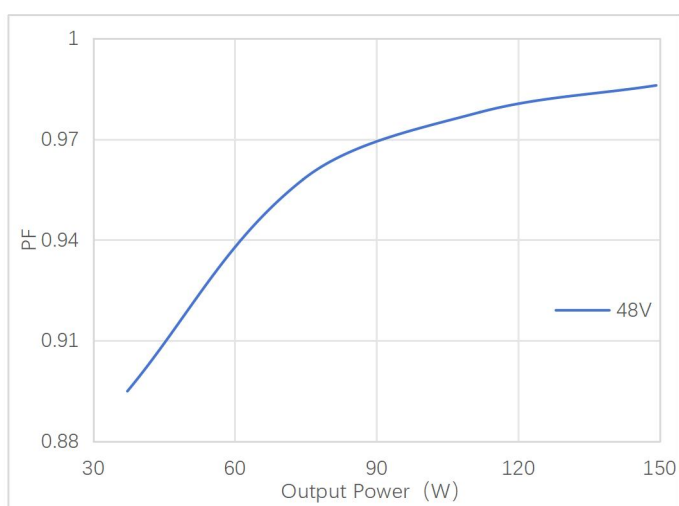
Operating Window



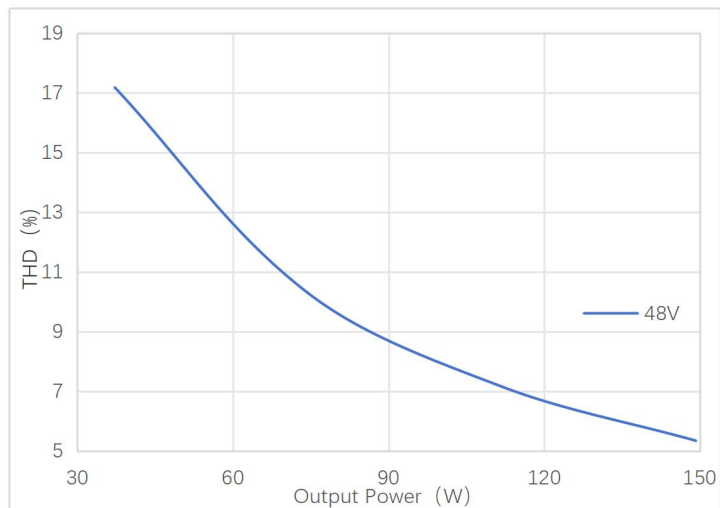
Typical Efficiency vs Load



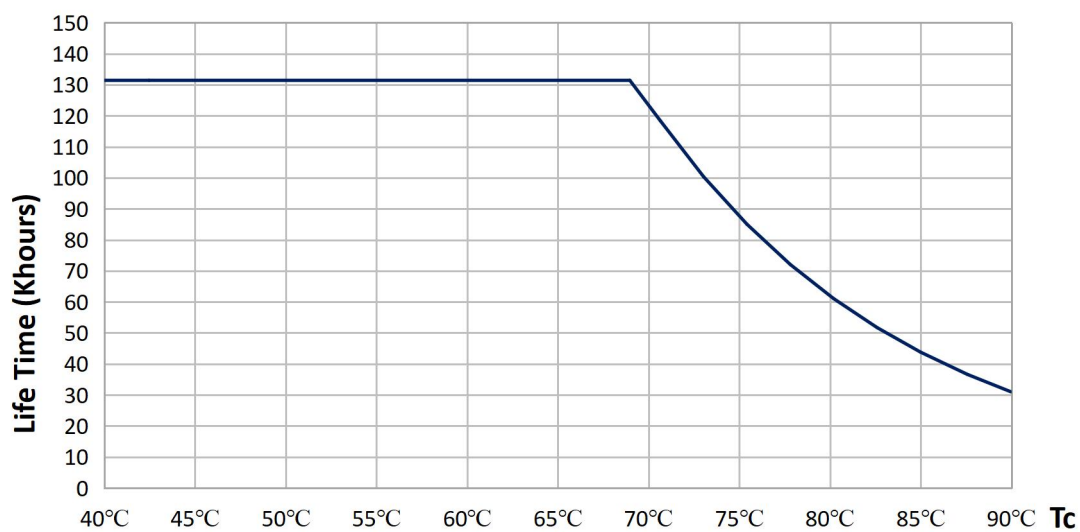
Typical Power Factor vs Load



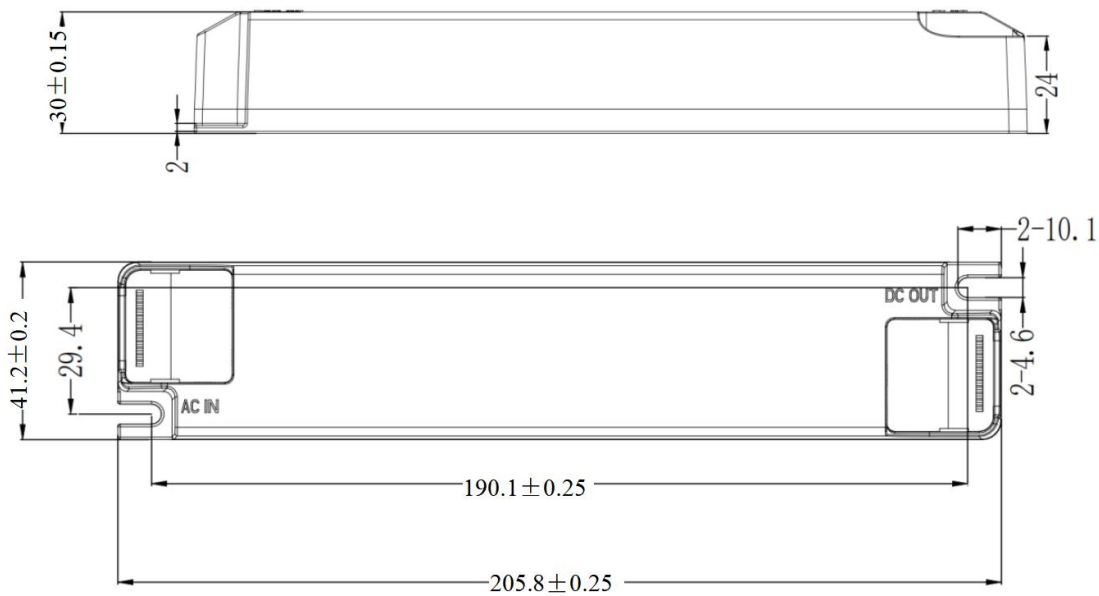
Typical THD vs Load



Lifespan



Dimensions (unit: mm)



| | |
|--------------------------------------|------------------------------|
| Mounting hole spacing, length | 190.1 ± 0.25 mm |
| Positioning hole diameter | 4.6 mm |
| Product weight | $249 \pm 5\%$ g |
| Cable cross-section, input side | 0.75 ... 1.5 mm ² |
| Cable cross-section, output side | 1.0 ... 2.5 mm ² |
| Wire preparation length, input side | 6... 7 mm |
| Wire preparation length, output side | 6... 7 mm |
| Length | 205.8 ± 0.25 mm |
| Width | 41.2 ± 0.2 mm |
| Height | 30.0 ± 0.15 mm |

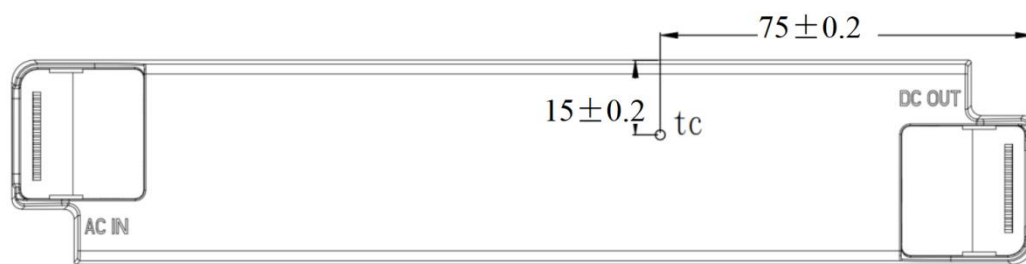
Colors & materials

| | |
|-----------------|-------|
| Casing material | PC |
| Casing color | White |

Temperature & operating conditions

| | |
|--------------------------------------|---|
| Ambient temperature range | -30 ... +50°C |
| Maximum temperature at tc test point | 90°C |
| Temperature range at storage | -30 ... +80°C (6 months in Class I environment) |
| Humidity range at storage | 20-95%RH (no condensation) |
| Humidity during operation | 20-90%RH |
| RoHS | RoHS 2.0 (EU) 2015/863 |

Tc test point (unit: mm)



Note: The picture is a front view. The Tc point is on the front of the product.

Product terminal

| Input | | Output | |
|-------|-----------------------|--------|--|
| AC-L | AC live wire input | LED+ | Positive terminal output of LED driver |
| AC-N | AC neutral wire input | LED- | Negative terminal output of LED driver |
| | | LED+ | Positive terminal output of LED driver |
| | | LED- | Negative terminal output of LED driver |

Capabilities

| | |
|-----------------------------|-----------------------------|
| Dimmable | - |
| Over-temperature protection | - |
| Overload protection | 110-150% (Auto-recovery) |
| Short circuit protection | Hiccup mode (Auto-recovery) |
| No-load protection | - |
| Suitable for fixtures | II |
| Control interface | - |
| Output interface | 2 channels |

Programming

| | |
|-----------------------|---|
| Programming device | - |
| DALI control software | - |
| APP | - |

Certificates & standards

| | |
|---------------------------|---|
| Approval marks – approval | CE, CCC, ENEC, RCM, CB |
| Standards | GB 19510.1-2009, GB 19510.14-2009, GB 7000.1-2015 IEC/EN 61347-2-13, IEC/EN 61347-1, IEC/EN 62493 IEC/EN 62384 AS 61347.1, AS 61347.2.13 |
| EMC | GB 17625.1-2022, GB/T 17743-2021 EN 55015, EN 61547, EN 61000-3-2,3 |
| Type of protection | IP20 |

Logistical data

| Product | Packaging unit (Pieces/Unit) | Dimensions (L*W*H) | Volume | Gross weight |
|-----------------|---------------------------------|--------------------|-----------------------|--------------|
| LF-GHY150H48-SP | 42 | 385mm*285mm*210mm | 23.04 dm ³ | 10.5kg±5% |

Test equipment & condition

| | |
|----------------|---|
| Test equipment | AC power source: CHROMA6530, digital power meter: CHROMA66205, oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: EEC SE7440, flicker tester (flicker-free coefficient test): Everfine LFA-3000, etc. |
|----------------|---|

If there are no special remarks, the above parameters are tested at the ambient temperature of 25℃, humidity of 50%, maximum output load and input voltage of 230Vac/50Hz.

Additional information

1. It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.
2. The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. Thus, the manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.
3. The number of LED drivers that can be connected to a circuit breaker and the inrush current are tested under the same conditions.
4. The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above.

Transportation & storage

Suitable transportation means: vehicles, boats and aeroplanes.

In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact on LED driver as much as possible.

The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

Cautions

Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.

Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.

Man-made damage is beyond the scope of Lifud warranty service.

Disclaimer

Subject to change without notice. Errors and omissions excepted. Always make sure to use the most recent release.

Lifud Technology Co., Ltd. reserves the right to interpret any content of this specification.