

LF-GMR040YS1050H(S)

GMR*YS SELV 8-shift output current | Constant Current - Non Dimmable



Product family features

- Low THD \leq 15%@full load
- Rated input voltage: 220-240Vac
- Ta: -30 $^{\circ}$ C~+60 $^{\circ}$ C
- Ripple current $<$ 5%
- 5 years guarantee



Product family benefits

- Output current adjustable via DIP switch in 8 shifts
- Super high efficiency
- Linear metal casing with 21mm housing height
- Long lifetime and high reliability
- Flicker free
- Isolated

Typical applications

- For linear light and tri-proof light
- For office, commercial, and decorative lighting

Product parameters

- Output current 700/750/800/850/900/950/1000/1050mA
- Output power 14-40.5W
- Input voltage 198–264Vac
- Output voltage 20-45Vdc
- Efficiency 89%

Electrical data

Input data

| | |
|--|----------------------------|
| Rated input voltage | 220 ... 240V |
| AC voltage range | 198 ... 264V |
| Mains frequency | 0/50/60Hz |
| Input voltage DC | 220 ... 240V ¹⁾ |
| Power factor | ≥0.95 |
| Efficiency | 89% |
| THD | ≤15% |
| Input current | 0.24A Max |
| Inrush current | 25A ²⁾ |
| Loading number on circuit breaker 10 A (B) | 21 |
| Loading number on circuit breaker 10 A (C) | 28 |
| Loading number on circuit breaker 16 A (B) | 34 |
| Loading number on circuit breaker 16 A (C) | 45 |
| Protective conductor current | ≤3.5mA |

Output data

| | |
|--------------------------------|---|
| Nominal output voltage | 20 ... 45V ³⁾ |
| Nominal output current | 700/750/800/850mA/900/950/1000/1050mA |
| Default output current | 1050mA |
| Current setting | DIP switch (please see the DIP switch definition) |
| Maximum output power | 40.5W |
| Nominal output power | 14... 40.5W |
| Output ripple current (100 Hz) | <5% |
| Flicker | According to IEEE Std 1789-2015 |
| CIE SVM | ≤0.4 |
| IEC-Pst | ≤1 |
| Output current tolerance | ±5% |
| Temperature tolerance | ±10% |
| Start-up time | <0.5S |

Safety

| | |
|-------------------------------|---|
| Withstanding voltage | I/P-O/P: 3.75kV&5mA&60S; I/P-PG: 1.5kV&5mA&60S; O/P-PG: 0.5kV&5mA&60S |
| Surge capability (L-N) | 1kV |
| Surge capability (L/N-Ground) | 2kV |
| Insulation resistance | I/P-PG I/P-O/P O/P-PG: > 100MΩ@500VDC |
| Guarantee | 5 years ⁴⁾ |

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

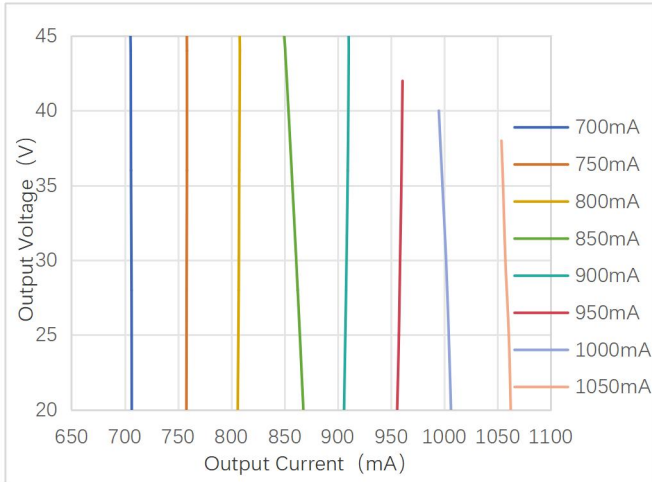
2) t =250μs

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

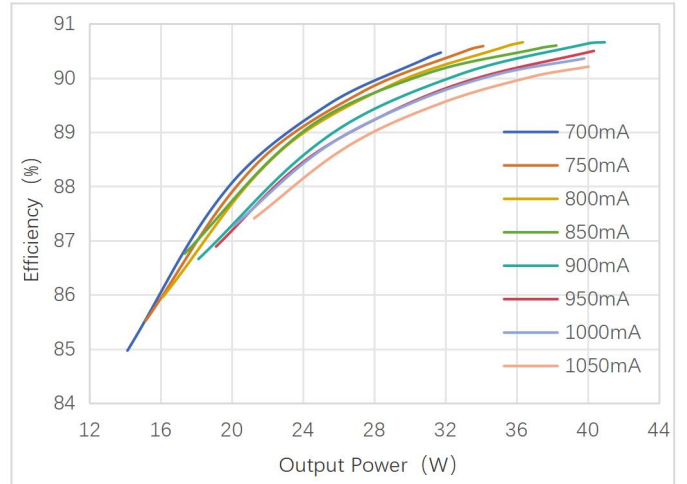
4) 5 years @Tc≤ 85°C

Characteristic diagrams

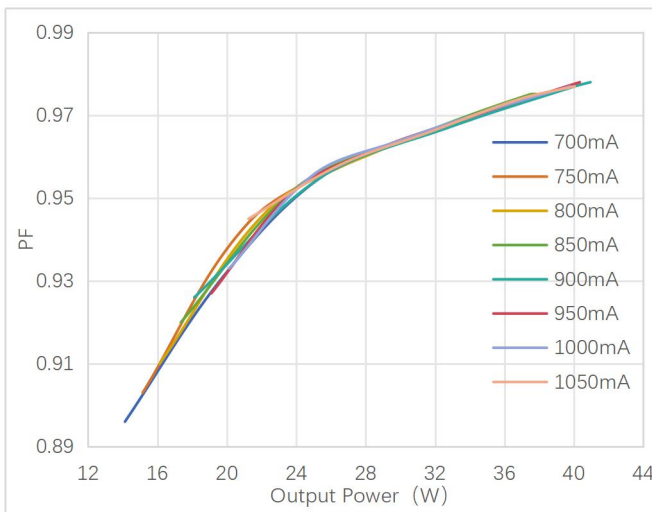
Operating Window



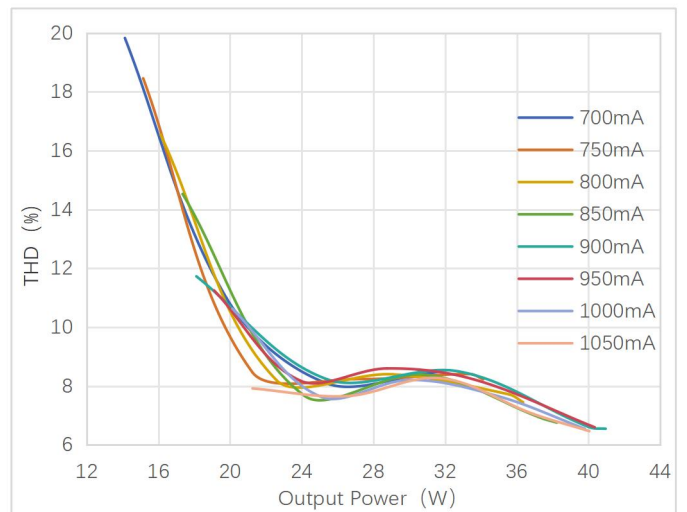
Typical Efficiency vs Load



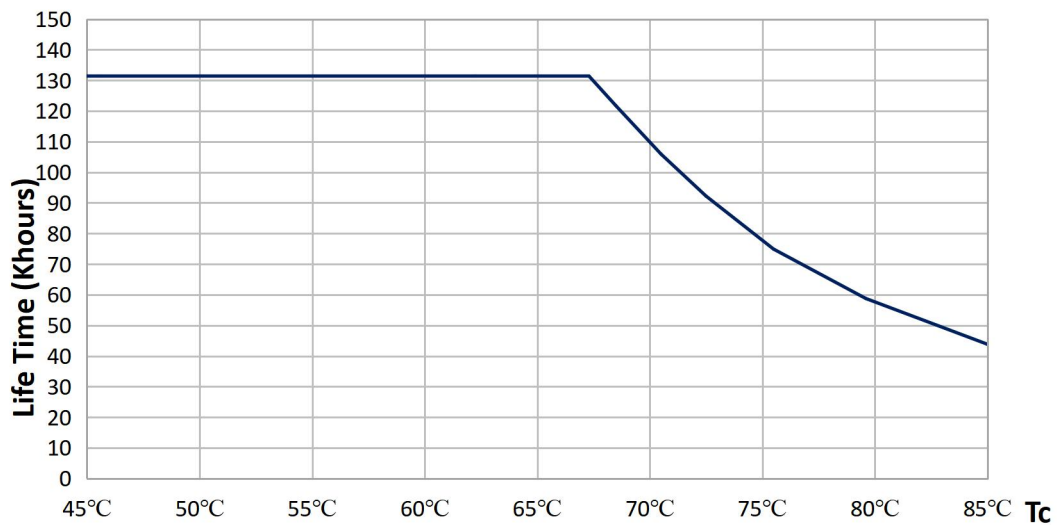
Typical Power Factor vs Load



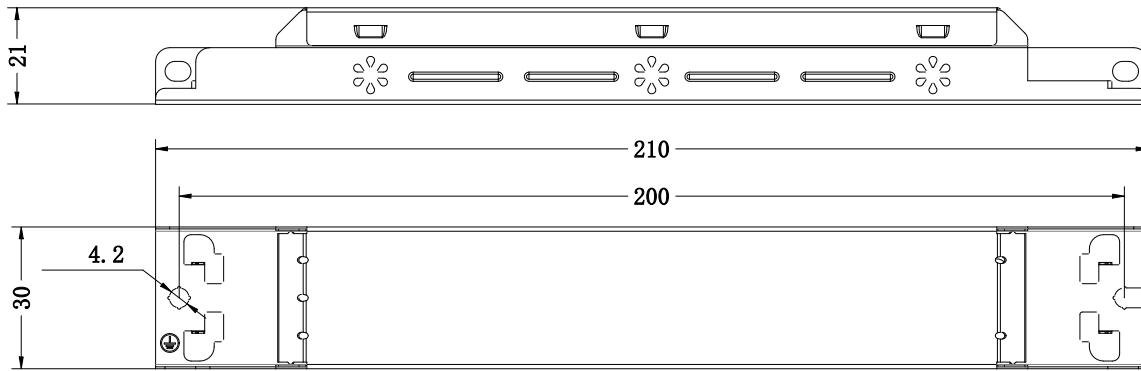
Typical THD vs Load



Lifespan



Dimensions



| | |
|---|-----------------------------|
| Mounting hole spacing, length | 200.0mm |
| Positioning hole diameter | 4.2mm |
| Product weight | 128.0g |
| Cable cross-section, input side | 0.5 ... 1.5 mm ² |
| Cable cross-section, output side | 0.5 ... 1.5 mm ² |
| Wire preparation length, input side | 7 ... 8mm |
| Wire preparation length, output side | 7 ... 8mm |
| Length | 210.0mm |
| Width | 30.0mm |
| Height | 21.0mm |

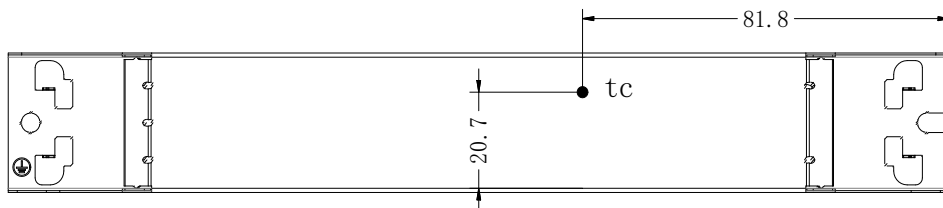
Colors & materials

| | |
|------------------------|-------------------------------|
| Casing material | Color coated galvanized sheet |
| Casing color | White |

Temperature & operating conditions


| | |
|---|---|
| Ambient temperature range | -30°C - +60°C |
| Maximum temperature at Tc test point | 85°C |
| Temperature range at storage | -30°C - +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



Note: this diagram is the front view and Tc point is on the front side of the driver.

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 |
|  | Earth wire | | |

DIP switch definition

| Output current | Output voltage | DIP switch 1 | DIP switch 2 | DIP switch 3 |
|----------------|----------------|--------------|--------------|--------------|
| 700mA | 20-45Vdc | - | - | - |
| 750mA | 20-45Vdc | - | - | ON |
| 800mA | 20-45Vdc | - | ON | - |
| 850mA | 20-45Vdc | - | ON | ON |
| 900mA | 20-45Vdc | ON | - | - |
| 950mA | 20-42Vdc | ON | - | ON |
| 1000mA | 20-40Vdc | ON | ON | - |
| *1050mA | 20-38Vdc | ON | ON | ON |

Note: "-": shift OFF. "**": default current. When adjusting the output current via the DIP switch, please disconnect input AC first so as to use the DIP switch without the input AC connected.

Capabilities

| | |
|---|---------------|
| Dimmable | - |
| Over-temperature protection | - |
| Overload protection | - |
| Short circuit protection | Self-recovery |
| No-load protection | <59V |
| Suitable for fixtures with prot. class | I |

| | |
|--------------------|-----------|
| Control interface | - |
| Number of channels | 1 channel |

Programming

| | |
|-----------------------|---|
| Programmer | - |
| DALI control software | - |
| APP | - |

Certificates & standards

| | |
|--------------------|--|
| Approval marks | ENEC, UKCA, CE, CB, EL, RCM, CCC |
| Standards | GB 19510.1-2009, GB 19510.14-2009 IEC/EN 61347-2-13, IEC/EN 61347-1, IEC/EN 62493 IEC/EN 62384 IEC/EN 61347-2-13 Annex J 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-GMR040YS1050H(S) | 63 | 385mm*285mm*210mm | 23.04 dm ³ | 8.63kg±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°C, humidity of 50%, maximum output power 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.

5. It is recommended to install double-pole switch at AC input terminal. If user uses the single-pole switch, make sure to connect it to wire L (live wire), otherwise the afterglow of light fixture would be incurred after the AC is disconnected.

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.