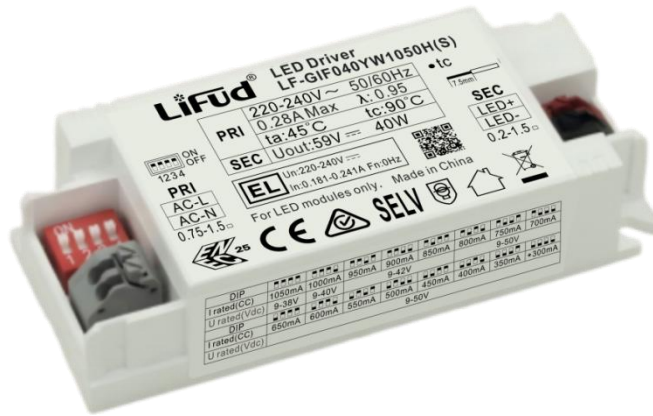


LF-GIF040YW1050H(S)

GIF*YW SELV Current Adjustable LED Driver | Constant Current - Non Dimmable



Product family features

- Low THD≤20%
- Rated input voltage: 220-240 Vac
- Ta range: -30 - +45 °C
- Ripple current<5%
- High efficiency up to 90%
- Suitable for Class I/II light fixtures
- 5 years guarantee
- Lifetime up to 100,000h
- Built-in or independent usage

Product family benefits

- 21.8mm ultra-thin
- 16-shift output current adjustable via 4-bit DIP switch
- Surge level: L-N: 2kV
- Flicker free; isolated

Typical applications

- For panel light
- For office, commercial, and decorative lighting

Product parameters

- Output current 300-1050mA
- Output power 2.7-40W
- Input voltage 198–264Vac
- Output voltage 9-50Vdc
- Efficiency 90%

Electrical data

Input data

Rated AC input voltage	220 ... 240 V
AC voltage range	198 ... 264 V
Mains frequency	0/50/60 Hz
Rated DC input voltage	220 ... 240 V ¹⁾
DC voltage range	176 ... 280V
Power factor	0.95 ²⁾ @230Vac full load
Efficiency	89% ³⁾ @230Vac full load
THD	≤20%
Input current	0.28A Max
Inrush current	30A ⁴⁾
Loading number on circuit breaker 10 A (B)	17
Loading number on circuit breaker 10 A (C)	29
Loading number on circuit breaker 16 A (B)	28
Loading number on circuit breaker 16 A (C)	47
Protective conductor current	≤0.7mA

Output data

Nominal output voltage	9 ... 50V
Nominal output current	300/350/400/450/500/550/600/650/700/750/800/850/ 900/950/1000/1050mA ⁵⁾
Default output current	300mA
Current setting	DIP Switch
Maximum output power	40W
Nominal output power	2.7...40W
Output ripple current (100 Hz)	<5%
Flicker	According to IEEE Std 1789-2015
CIE SVM	≤0.4
IEC-Pst	≤1
Output current tolerance	±5% ⁶⁾
Temperature tolerance	±10%
Start-up time	<0.5S

Safety

Withstanding voltage	I/P-O/P: 3.75kV&5mA&60S
Surge capability (L-N)	2kV
Insulation resistance	I/P-O/P: >100MΩ@500Vdc
Lifetime	Up to 100,000 hours ⁷⁾
Guarantee	5 years ⁸⁾

1) DC input is only for emergency with the max using time of 90 mins

2) 0.95@800mA-1050mA; 0.9C@400mA-800mA; 0.85@300mA-350mA

3) 3)89%@700mA-950mA; 88%@400mA-800mA; 87%@300mA-350mA

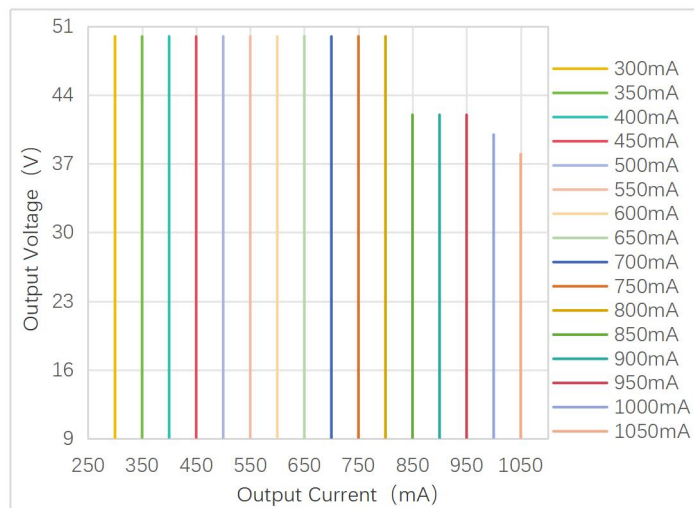
4) t =160 μs

5) Refer to the operating window for the relation between output voltage and current (9-38V@1050mA;
9-40V@1000mA; 9-42V@850-950mA; 9-50V@300-800mA)

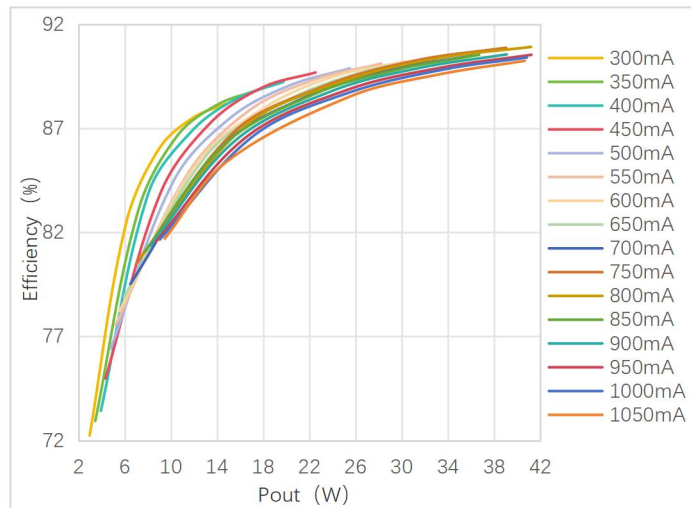
- 6) $\pm 15\%$ @300-350mA; $\pm 12\%$ @400-450mA; $\pm 8\%$ @500-800mA; $\pm 5\%$ @850-1050mA
7) For details, please refer to the service life table
8) 5 years@ $T_c \leq 90^\circ\text{C}$

Characteristic diagrams

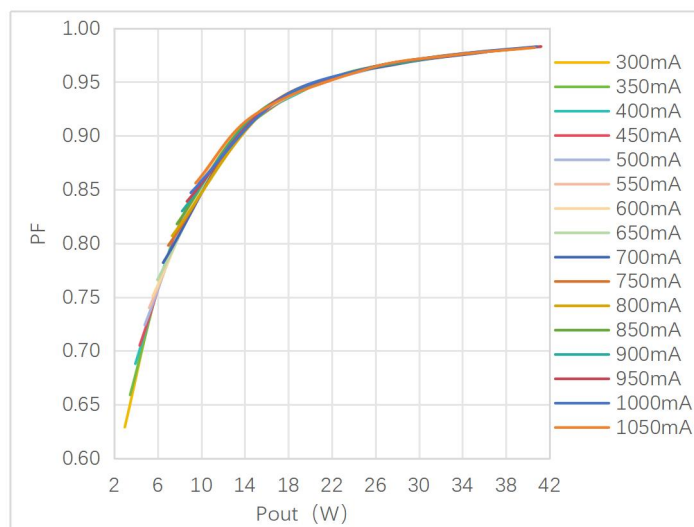
Operating Window



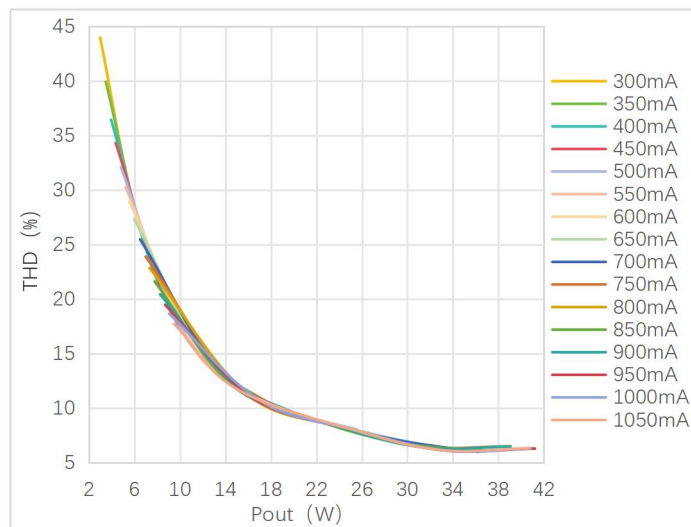
Typical Efficiency vs Load



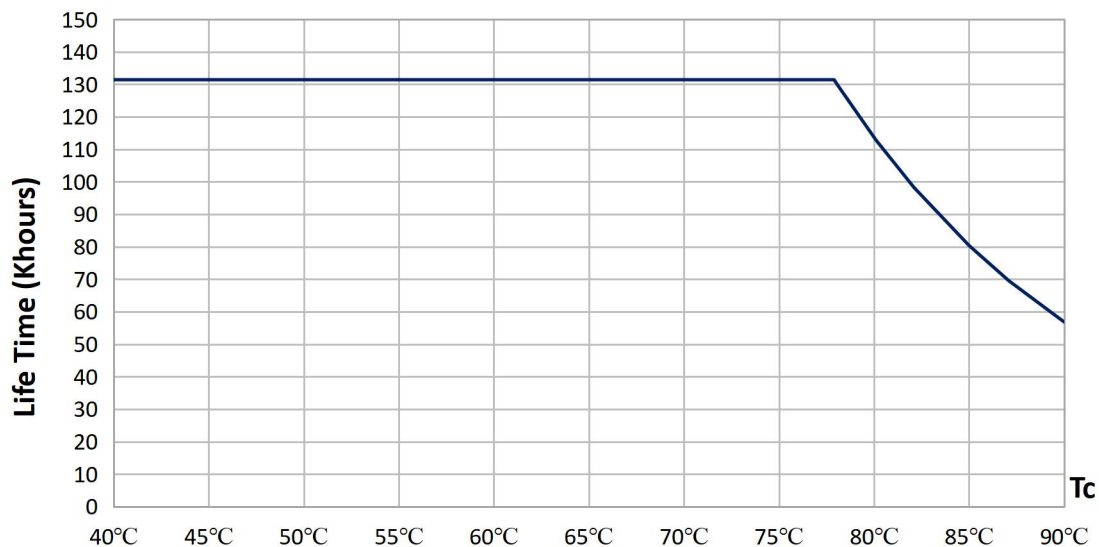
Typical Power Factor vs Load



Typical THD vs Load



Lifespan



Service life

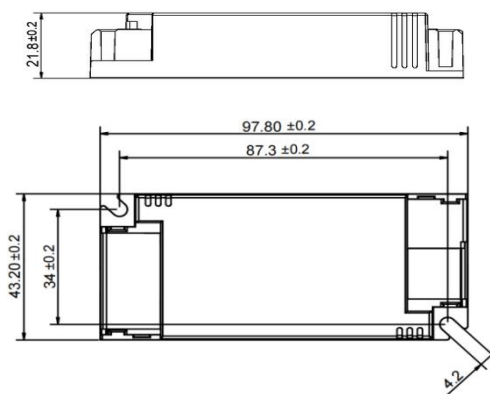
Model	Iout	Pout	Ta	35°C	45°C
LF-GIF040YW1050H(S)	1050mA	40W	Tc	80°C	90°C
			Lifetime	>100,000h	>50,000h

Note: The design life of the LED driver is as described above under reference conditions. The failure probability is less than 10%.

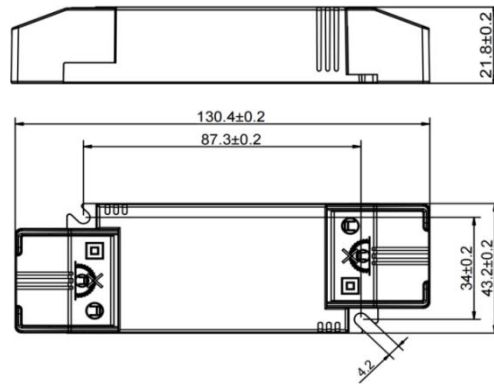
The relationship between Tc and Ta also depends on the design of the luminaire.

Dimensions (Unit: mm)

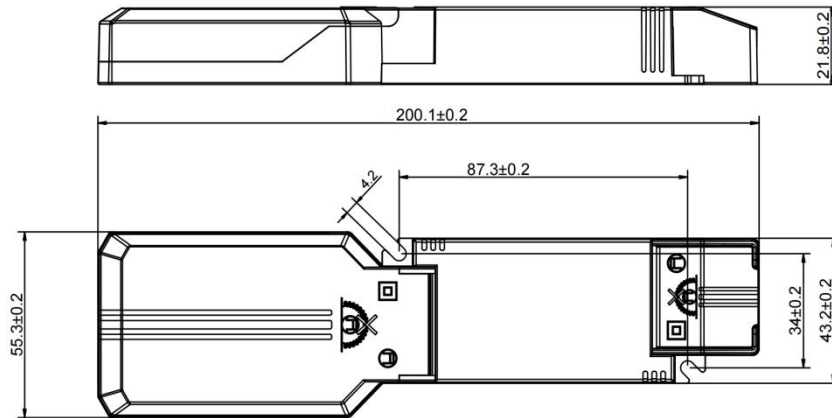
Built-in use (without end cap)



Independent use 1 (with Type D end caps for input and output terminals)



Independent use 2 (with Type D end cap for output terminal & Type F end cap for input terminal)



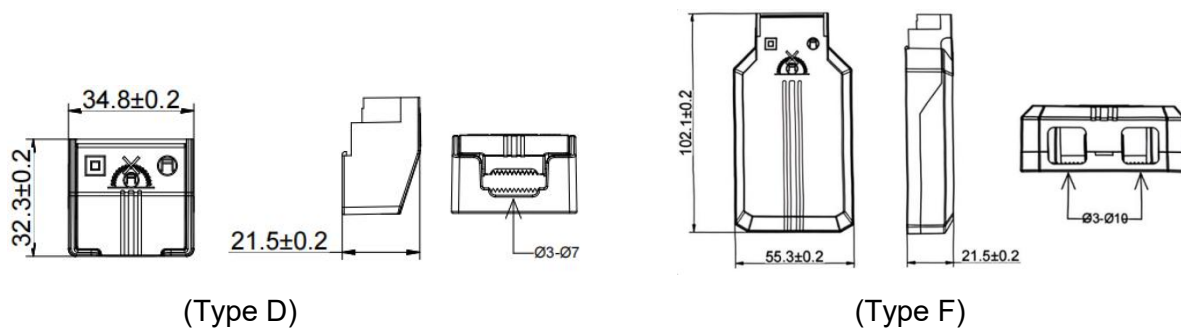
Mounting hole spacing, length	87.3 ± 0.2 mm
Mounting hole spacing, width	34 ± 0.2 mm
Positioning hole diameter	4.2 mm
Product weight	88 g
Cable cross-section, input side	0.75 ... 1.5 mm ² ; 0.75 ... 2.5 mm ² (Type F)
Cable cross-section, output side	0.2 ... 1.5 mm ²
Wire outside diameter, input side	3 ... 7 mm (Type D) 3 ... 10 mm (Type F)
Wire outside diameter, output side	3 ... 7 mm (Type D)
Wire preparation length, input side	7 ... 8 mm
Wire preparation length, output side	7 ... 8 mm
Length	97.8 ± 0.20 mm
Width	43.2 ± 0.20 mm
Height	21.8 ± 0.20 mm

Colors & materials

Casing material	PC
Casing color	White

Accessory (optional)

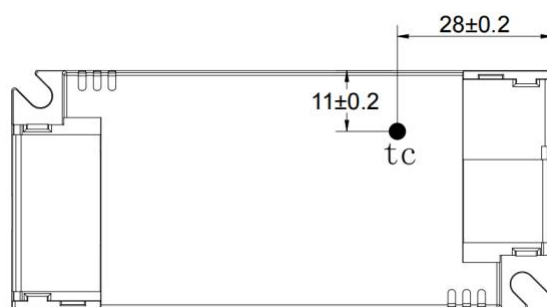
Type F	P/N: 5.1.08000000005
Type D	P/N: 5.1.08000000004



Temperature & operating conditions

Ambient temperature range	-30 ... +45°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	20-75%RH (no condensation)
Humidity during operation	20-95%RH (no condensation)
Atmospheric pressure	80-106KPa
RoHS	RoHS 2.0 (EU) 2015/863

Tc test point (Unit: mm)



Tc point is at the top of LED 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

DIP switch definition

Output current	Output voltage	1	2	3	4
* 300mA	9-50Vdc	-	-	-	-
350mA	9-50Vdc	-	-	-	ON
400mA	9-50Vdc	-	-	ON	-
450mA	9-50Vdc	-	-	ON	ON
500mA	9-50Vdc	-	ON	-	-
550mA	9-50Vdc	-	ON	-	ON
600mA	9-50Vdc	-	ON	ON	-
650mA	9-50Vdc	-	ON	ON	ON
700mA	9-50Vdc	ON	-	-	-
750mA	9-50Vdc	ON	-	-	ON
800mA	9-50Vdc	ON	-	ON	-
850mA	9-42Vdc	ON	-	ON	ON
900mA	9-42Vdc	ON	ON	-	-
950mA	9-42Vdc	ON	ON	-	ON
1000mA	9-40Vdc	ON	ON	ON	-
1050mA	9-38Vdc	ON	ON	ON	ON

Note: “-”: 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	Automatic reversible
No-load protection	<59V
Suitable for fixtures with prot. class	II
Control interface	-
Output interface	1 channel

Programming

Programming device	-
DALI control software	-
APP	-

Certificates & standards

Approval marks – approval	ENEC, CB, CE, RCM, EL
Standards	EN 61347-2-13; EN 61347-1; EN 62384; EN 62493; EN 55015; EN 61547; EN 61000-3-2; EN 61000-3-3; IEC61347-1; IEC61347-2-13; EN IEC 61347-2-13 Annex J; AS 61347.2.13 & AS/NZS 61347.1
Type of protection	IP20

Logistical data

Product	Packaging unit (Pieces/Unit)	Dimensions (L*W*H)	Volume	Gross weight
LF-GIF040YW1050H(S)	96	385mm*285mm*210mm	23.04dm ³	9.66kg±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.
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If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full 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.

5. When a different luminaire is connected, the LED driver will automatically adjust its current based on the luminaire's load voltage upon the first power-on.

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

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.

1. When using the products which have been stored for more than 6 months, please re-test their electrical parameters firstly by powering on. Do not use them unless they are tested to be qualified.

2. When using the products which have been stored for 6 to 12 months, please run them on power for more than 2 hours firstly.

3. When using the products which have been stored for more than 12 months, please conduct an actual assessment of quality risks firstly. Direct use is not recommended.

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.