



## Product Feature

- Global universal voltage: 90-264VAC 50/60Hz
- Pin: CN,EU,US, UK, AU standard
- Operating temperature range:-20℃ to +40℃
- Output short circuit, overcurrent, and over temperature protection
- High efficiency and reliability
- Stable voltage output, low ripple noise
- Size: 56 x 28 x 37.5 mm ± 0.5MM
- 1-year warranty



This series of power supplies has the advantages of global input voltage range, low power consumption, high efficiency, high reliability, and safe isolation. The product is safe and reliable, with good EMC performance. The EMC and safety specifications meet the IEC/EN6100-4, CISPR32/EN5032, and UL/EN/IEC62368 standards. This series of products is widely used in industries such as network equipment, office equipment, small appliances, and electronic products. When applied in environments with poor electromagnetic compatibility, reference must be made to the application circuit.

## Model Selection Table

| Certificate                      | Model Number | Power output   | Nominal output voltage and current (Vo/Io) | Efficiency (230VAC/%, Typ.) | Maximum Load (A) |
|----------------------------------|--------------|----------------|--------------------------------------------|-----------------------------|------------------|
| CE<br>FCC<br>ROHS<br>UKCA<br>ERP | GHY-050150   | 7.5W           | 5V/1.5A                                    | ≥76.65                      | 1.5              |
|                                  | GHY-050200   | 10.0W          | 5V/2.0A                                    | ≥78.70                      | 2.0              |
|                                  | GHY-050300   | 15.0W          | 5V/3.0A                                    | ≥81.39                      | 3.0              |
|                                  | GHY-120100   | 12.0W          | 12V/1.0A                                   | ≥82.96                      | 1.0              |
|                                  | GHY-120150   | 18.0W          | 12V/1.5A                                   | ≥85.00                      | 1.5              |
|                                  | GHY-120200   | 24.0W          | 12V/2.0A                                   | ≥86.20                      | 2.0              |
|                                  | 5V-48V       | 12W-24W Series | --                                         | --                          | --               |

## Input characteristics

| Item            | Working conditions | Min.    | Typ. | Max. | unit |
|-----------------|--------------------|---------|------|------|------|
| Input Voltage   | AC input           | 90      | --   | 264  | VAC  |
| Input frequency |                    | 47      | --   | 63   | Hz   |
| Input Current   | 115VAC             | --      | --   | 250  | mA   |
|                 | 230VAC             | --      | --   | 150  |      |
| Impulse current | 115VAC             | --      | 35   | --   | A    |
|                 | 230VAC             | --      | 50   | --   |      |
| hot plugging    |                    | Support |      |      |      |

## Output characteristics

| Item                        | Working conditions             | Min.                                                              | Typ.  | Max. | unit |
|-----------------------------|--------------------------------|-------------------------------------------------------------------|-------|------|------|
| Voltage accuracy            |                                | --                                                                | ±5    | --   | %    |
| Load regulation rate        | Full load                      | --                                                                | ±5    | --   |      |
| Ripple noise*               | 20MHz Bandwidth (peak to peak) | --                                                                | --    | 150  | mV   |
| Standby power               |                                | --                                                                | --    | 0.1  | W    |
| Temperature coefficient     |                                | --                                                                | ±0.02 | --   | %/℃  |
| Short circuit protection    |                                | Hiccup type, capable of long-term short circuit and self recovery |       |      |      |
| Overcurrent protection      |                                | ≥120% Io, self recovery                                           |       |      |      |
| Over Temperature Protection |                                | 0                                                                 | ≥40   | --   | ℃    |
| Power-off protection time   | 230VAC input                   | --                                                                | 35    | --   | ms   |

Note: The testing method for ripple and noise adopts the parallel line testing method. For specific operation methods, please refer to the "Application Guide for AC-DC Switching Power Supply"

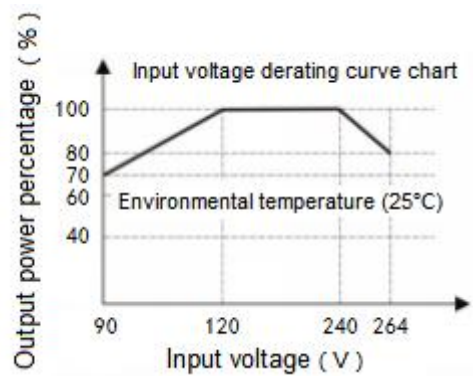
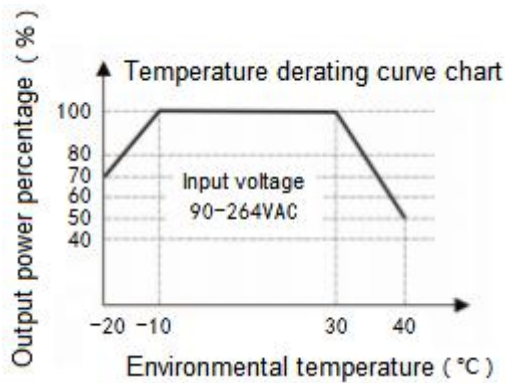
General characteristics

| item                  |              | Working conditions                                                                                                                                     | Min.                        | Typ. | Max. | unit   |
|-----------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------|------|--------|
| Isolation voltage     | input-output | Test time 1 minute, leakage current<5 mA                                                                                                               | 3000                        | --   | 3750 | VAC    |
| Operation temperature |              |                                                                                                                                                        | -20                         | --   | +40  | ℃      |
| Storage temperature   |              |                                                                                                                                                        | -25                         | --   | +65  |        |
| Storage humidity      |              |                                                                                                                                                        | --                          | --   | 90   | %RH    |
| Switching frequency   |              |                                                                                                                                                        | --                          | 65   | --   | kHz    |
| Power derating        |              | -20℃ to -10℃                                                                                                                                           | 2.0                         | --   | --   | % /℃   |
|                       |              | +30℃ to +40℃                                                                                                                                           | 2.5                         | --   | --   |        |
|                       |              | 90VAC - 100VAC                                                                                                                                         | 0.375                       | --   | --   | % /VAC |
|                       |              | 240VAC - 264VAC                                                                                                                                        | 0.833                       | --   | --   |        |
| Safety standards      |              | Passed:<br>EN IEC 62368-1: 2020+A11: 2020<br>GB 4943. 1-2022<br>Conforms to:<br>GB/T 9254. 1-2021<br>GB 17625. 1-2022<br>UL/IEC62368-1 & BS EN 62368-1 |                             |      |      |        |
| MTBF                  |              |                                                                                                                                                        | MIL-HDBK-217F@25℃ >30,000 h |      |      |        |

EMC characteristics

|     |                                                         |                  |                                                                        |                  |
|-----|---------------------------------------------------------|------------------|------------------------------------------------------------------------|------------------|
| EMI | Conducted Disturbance                                   | CISPR32/EN55032  | CLASS B                                                                |                  |
|     | Radiated Disturbance                                    | CISPR32/EN55032  | CLASS B                                                                |                  |
| EMS | Electrostatic Discharge                                 | IEC/EN61000-4-2  | Contact ±6KV                                                           | Perf. Criteria B |
|     | Radiated immunity                                       | IEC/EN61000-4-3  | 10V/m                                                                  | Perf. Criteria A |
|     | Pulse group immunity                                    | IEC/EN61000-4-4  | ±2KV                                                                   | Perf. Criteria B |
|     | Surge immunity                                          | IEC/EN61000-4-5  | line to line ±1KV                                                      | Perf. Criteria B |
|     | Conducted disturbance immunity                          | IEC/EN61000-4-6  | 10Vr.m.s                                                               | Perf. Criteria A |
|     | Voltage sag, drop, and short-term interruption immunity | IEC/EN61000-4-11 | 100% dip 1 periods, 30% dip 25 periods, 100% interruptions 250 periods | Perf. Criteria B |

Product characteristic curve



Physical property

|                |                          |
|----------------|--------------------------|
| Shell size     | 56 x 28 x 37.5 mm ±0.5MM |
| Weight         | 73.5g(Typ.)              |
| Cooling method | Natural air cooling      |

### Characteristics of shell pins

|                  |                                                     |
|------------------|-----------------------------------------------------|
| Type             | CN,EU,US,UK,AU standard                             |
| Plastic material | material, environmental protection, fire prevention |
| Pin hardware     | Copper feet                                         |



CN



US



EU



AU



UK

### DC plug specifications

|                        |                                                                                                                                            |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Type                   | DC Head/Android Micro 5pin/Type-c/Aviation Head/Terminal Wire/Bare Wire Stripping and Tin Plating/Small Appliance Customization Head/Other |
| DC head specifications | 5.5*2.1 / 5.5*2.5 / 4.0*1.7 / 3.5*1.35 / 2.5*0.7 / Other                                                                                   |
| length                 | Standard 1.2 meters/1.5 meters, customizable wire length                                                                                   |



3.5\*1.35



4.0\*1.7



5.5\*2.1



5.5\*2.5



6.3\*2.5



Type-c



2PIN  
航空头



2.5\*0.7



4.0\*1.7



5.5\*2.1



5.5\*2.5



micro



B字尾



8字尾



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定制

#### Note:

1. For more detailed parameter information, please contact the sales personnel.
2. All indicators in this manual are measured at Ta=25 ℃, humidity<75%, nominal input voltage, and output rated load;
3. The testing methods for all indicators in this manual are based on our company's enterprise standards;
4. Our company can provide product customization, and specific requirements can be directly contacted by our technical personnel;

#### Contact information/联系方式

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