GlacialPower®

Power Your Idea

www.GlacialPower.com

GlacialPower was established in 2006 by a talented team of highly qualified and experienced engineering professionals from the Switch Mode Power Supply (SMPS) industry. The eleven founder members collectively account for more than 150 man years of rich experience in product design, quality control and manufacture of SMPS products and have been closely involved in product design & development for globally renowned brands like Acer, Asus, Cisco, Dell, Fujitsu-Siemens, Gateway, HPQ, IBM, LG Electronics, Microsoft, Samsung, Sony, Toshiba and Wistron. Solid Quality Control, a manufacturing process approved by companies such as Dell, HPQ, and IBM, is also an invention that is credited to the talented GlacialPower founders.

PC Power

ATX Power Supply

AL Series
350 / 450 / 550 / 650 Watts

▶ Electrical Specifications

Input Voltage Range:	90 ~ 264V AC, 47 ~ 63 Hz
Power Efficiency:	Average > 80%
Operating Temperature Range:	0 ~ 50˚C at full load
Operating Humidity:	10 ~ 90%
Leakage Current:	<3.5 mA / 240V AC
MTBF:	100K hrs min. MIL-HDBK-217F (25˚C)
Dimension:	PS2 Type 150 × 40 × 86 mm

▶ Safety Approval

E310720 R32461 CB

80 PLUS

▶ Output Loading

- 350W (APFC with 8/12 cm Fan)

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	0.3	0.3	0.5	0.5	0	0
Max. Current (A)	15	20	12	15	0.6	3
Combined Max. Power (W)	120		300		7.2	15
Total Max. Output Power (W)	350					

- 450W (APFC with 8/12 cm Fan)

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	0.3	0.3	0.5	0.5	0	0
Max. Current (A)	18	22	16	17	0.6	3
Combined Max. Power (W)	130		360		7.2	15
Total Max. Output Power (W)	450					

- 550W (APFC with 8/12 cm Fan)

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	0.3	0.3	0.5	0.5	0	0
Max. Current (A)	22	25	18	18	0.6	3
Combined Max. Power (W)	150		432		7.2	15
Total Max. Output Power (W)	550					

- 650W (APFC with 8/12 cm Fan)

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	1.0	0.5	1.0	1.0	0	0
Max. Current (A)	22	30	25	20	0.6	3
Combined Max. Power (W)	180		504		7.2	15
Total Max. Output Power (W)	650					

AP Series
500 / 600 / 700 Watts

▶ Electrical Specifications

Input Voltage Range:	90 ~ 264V AC, 47 ~ 63 Hz
Power Efficiency:	Average > 78%
Operating Temperature Range:	0 ~ 35˚C at full load, 50˚C at 80% loading
Operating Humidity:	10 ~ 90%
Leakage Current:	<3.5 mA / 240V AC
MTBF:	100K hrs min. MIL-HDBK-217F (25˚C)
Dimension:	150 × 140 × 86 mm

▶ Safety Approval

E310720 R32461 CB

▶ Output Loading

- 500W (APFC with 12 cm Fan)

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	1	0.5	1	1	0	0
Max. Current (A)	18	22	17	17	0.6	3
Combined Max. Power (W)	130		408		7.2	15
Total Max. Output Power (W)	500					

- 600W (APFC with 12 cm Fan)

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	1	0.5	1	1	0	0
Max. Current (A)	22	25	25	20	0.6	3
Combined Max. Power (W)	150		504		7.2	15
Total Max. Output Power (W)	600					

- 700W (APFC with 12 cm Fan)

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	1	0.5	1	1	0	0
Max. Current (A)	30	30	30	20	0.6	3
Combined Max. Power (W)	200		588		7.2	15
Total Max. Output Power (W)	700					

PC Power

ATX Power Supply

AX Series
950 Watts

80 PLUS SILVER

▶ Output Loading

- 950W (APFC with 14 cm Fan)

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	0	0	0.5	0.5	0	0
Max. Current (A)	25	25	38	38	0.5	3
Combined Max. Power (W)	150		780		6	15
Total Max. Output Power (W)	950					

▶ Electrical Specifications

Input Voltage Range:	100 ~ 240V AC, 47 ~ 63 Hz, 12A
Power Efficiency:	Average > 85%
Operating Temperature Range:	0 ~ 50˚C
Operating Humidity:	10 ~ 90%
Leakage Current:	<3.5mA / 240V AC
MTBF:	100K hrs min. MIL-HDBK-217F (25˚C)
Dimension:	150 × 86 × 160 mm

▶ Safety Approval

E310720 R32461 CB

SL Series
400 Watts

▶ Electrical Specifications

Input Voltage Range:
103 ~ 132V AC / 207 ~ 264V AC, 47 ~ 63 Hz
Power Efficiency:
Typical 72% power efficiency by passive PFC design
Operating Temperature Range:
0 ~ 40˚C at full load
Operating Humidity:
10 ~ 90%
Cooling With 12cm Fan:
100,000 hours(25˚C)
MTBF:
50K hrs min. MIL-HDBK-217F (25˚C)
Dimension:
PS2 Type 150 × 140 × 86 mm

▶ Output Loading

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Nominal Output Voltage (V)	5	3.3	12	12	-12	5
Min. Current (A)	0.5	0.5	1	1	0	0
Max. Current (A)	14	20	14	13	0.3	2.5
Max. Power (W)	70	66	168	156	3.6	12.5
Cowbined Max Power(W)	385W				16.1	
Total Max. Output Power (W)	400					

▶ Safety Approval

PC Power

ATX Power Supply

SL Series
350 Watts

▶ Output Loading

- 350W (PPFC with 12 cm Fan)

DC Output	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	0.3	0.5	0.5	0.5	0	0
Max. Current (A)	12	18	8	13	0.6	3
Combined Max. Power (W)	120		252		7.2	15
Total Max. Output Power (W)	350					

▶ Electrical Specifications

Input Voltage Range:	100 ~ 130V AC / 200 ~ 264V AC, 47 ~ 63 Hz
Power Efficiency:	Average > 70%
Operating Temperature Range:	0 ~ 40˚C at full load
Operating Humidity:	10 ~ 90%
Leakage Current:	<3.5 mA / 240V AC
MTBF:	50K hrs min. MIL-HDBK-217F (25˚C)
Dimension:	PS2 Type 150 × 140 × 86 mm

▶ Safety Approval

OF100 / 150 Series
DC-DC ATX 100 / 150 Watts

- **Solid Capacitors Design**

▶ Electrical Specifications

Input Voltage Range:
11 ~ 13V DC / 10A@12V DC
Power Efficiency:
Average > 93%@12V DC
Operating Temperature Range:
0 ~ 50˚C at full load
Operating Humidity:
20 ~ 90%
MTBF:
100K hrs min.MIL-HDBK-217F (25˚C)
Dimension:
150 × 30 × 20 mm

▶ Output Loading

- 100W

DC Output	+5V	+3.3V	+12	-12V	+5Vsb
Max. Current (A)	6	5	6	0.2	2
Max. Power (W)	30	16.5	72	2.4	10
Total Max. Output Power (W)	100				

- 150W

DC Output	+5V	+3.3V	+12	-12V	+5Vsb
Max. Current (A)	6	5	9	0.2	2
Max. Power (W)	30	16.5	108	2.4	10
Total Max. Output Power (W)	150				

- Total combined output of +5V and +3.3V is ≤ 45W

Combo Type

Adaptor Desktop Type

AC100P Series
Single output + USB port Combo AC / DC Input

DC Input
Output Voltage Selectable
USB Port

▶ Features

- Universal AC / DC Input Combo design.
- Compatible with most Notebooks
- 8 sections of output Voltage selectable
- 5V/1A USB port support for charging 3C device
- Protections: SCP / OVP / OCP/ OTP
- Built-in PFC function
- Convenience for travel Indoor/ in car/ on Airplane
- Convertible DC plug tips for choice
- Meet RoHS requirements and 2 years warranty

▶ Electrical Specifications

AC Input Voltage Range:	90 ~ 264V AC, 47 ~ 63 Hz, 2A.
DC Input Voltage Range:	11-15V DC or 11-30V DC.
Power Efficiency:	Average > 88%.
Operating Temperature Range:	0 ~ 40˚C at full load.
Operating Humidity:	5 ~ 95%.
Output Plug type:	multiple DC plug tips for choice.
Leakage Current:	< 250uA/240V AC.
MTBF:	100K hrs min.MIL-HDBK-217F(25˚C)
Dimension:	138.2 × 58.4 × 28.5 mm

▶ Output Loading

- 100W (AC Inlet with IEC320-C6 type)

Model: GP-AC100P-0S	DC Output Type (Selectable)								USB
Output Voltage	12	15	16	18.5	19	19.5	20	24	5V
Output Current	5.5	5.5	5.5	5.15	5	4.9	4.75	4	1A
Input Voltage	AC Input 90-264V AC Non-DC Input function								

Model: GP-AC100P-0C	DC Output Type (Selectable)								USB
Output Voltage	15	16	18.5	19	19.5	20	20.5	24	5V
Output Current	5.5	5.5	5.15	5	4.9	4.75	4.65	4	1A
Input Voltage	AC Input 90-264V AC , DC Input 11-15V								

▶ Safety Approval

E13 Complies with RTCA D0-160D

Combo Type

Adaptor Desktop Type

AC090N Series
Single output + USB port

Slim Type : 103 x 57 x 16.5 mm

Peak 90W

Output Voltage Selectable
USB Port
Output tips

▶ Features

- Universal AC Input Combo design.
- Compatible with most Notebooks
- 8 sections of output Voltage selectable
- 5V/1A USB port support for charging 3C device
- Protections: SCP / OVP / OCP/ OTP
- Convertible DC plug tips for choice
- Meet RoHS requirements and 2 years warranty

▶ Electrical Specifications

AC Input Voltage Range:	90 ~ 264V AC, 47 ~ 63 Hz, 2A.
Power Efficiency:	Average > 88%.
Operating Temperature Range:	0 ~ 40˚C at full load.
Operating Humidity:	5 ~ 95%.
Output Plug type:	multiple DC plug tips for choice.
Leakage Current:	< 250uA/240V AC.
MTBF:	100K hrs min.MIL-HDBK-217F(25˚C)
Dimension:	103.5 × 57.3× 16.5mm / 0.18kg

▶ Output Loading

- 65W (AC Inlet with IEC320-C8 type)

Model: GP-AC090N-0S	DC Output Type (Selectable)								USB
Output Voltage	12	15	16	18.5	19	19.5	20	24	5V
Output Current	4.5	4.33	4.06	3.5	3.42	3.3	3.25	2.71	1A
Input Voltage	AC Input 90-264V AC Non-DC Input function								

DeskTop Type

AH065-OS Series
Single output 65 Watts

Retail Packing

▶ Electrical Specifications

Input Voltage Range:	90 ~ 264V DC, 47 ~ 63 Hz, 1.7A
Power Efficiency:	Average > 85%
Operating Temperature Range:	0 ~ 40˚C at full load
Operating Humidity:	10 ~ 90%
Leakage Current:	<60 uA / 240V AC
MTBF:	100K hrs min.MIL-HDBK-217F (25˚C)
Dimension:	108 × 45.5 × 30.5 mm

▶ Output Loading

- 65W (AC Plug Type: C6)

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
AH065-OS	19V	3.42A	85%	±5%	200mVpp	65 W

▶ Safety Approval

CB

AH090-OS Series
Single output 90 Watts

Retail Packing

▶ Electrical Specifications

Input Voltage Range:	90 ~ 264V DC, 47 ~ 63 Hz, 1.7A
Power Efficiency:	Average > 85%
Operating Temperature Range:	0 ~ 40˚C at full load
Operating Humidity:	10 ~ 90%
Withstand Voltage:	I/P ~ O/P: 3KV AC, I/P ~ FG: 1.5KV AC
Leakage Current:	<75 uA / 240V AC
MTBF:	100K hrs min.MIL-HDBK-217F (25˚C)
Dimension:	117 × 53 × 30 mm

▶ Output Loading

- 90W (AC Plug Type: C6 / C14)

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
AH090-OS	19V	4.74A	85%	±5%	200mVpp	90 W

▶ Safety Approval

CB

WallMount Type

AS60N Series

▶ Electrical Specifications

Input Voltage Range:
90 ~ 264V DC, 47 ~ 63 Hz, 1.7A
Power Efficiency:
Average > 85%
Operating Temperature Range:
-10 ~ 40˚C at full load
Operating Humidity:
10 ~ 90%
Withstand Voltage:
I/P ~ O/P: 3KV AC, I/P ~ FG: 1.5KV AC
Output Plus type:
2.1 x 5.5 x 9 mm, Inner+
Leakage Current:
<3.5 mA / 240V AC
MTBF:
100K hrs min.MIL-HDBK-217F (25˚C)
Dimension:
117 × 53 × 30 mm

▶ Output Loading

- 60W (AC Plug Type: C14)

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
AS40N-12	12V	3.3A	80%	±5%	200mVpp	40W
AS50N-12	12V	4.16A	85%	±5%	200mVpp	50W
AS60N-12	12V	5A	85%	±5%	200mVpp	60W
AS60N-15	15V	4A	85%	±5%	200mVpp	60W
AS60N-19	19V	3.16A	85%	±5%	200mVpp	60W
AS60N-24	24V	2.5A	85%	±5%	200mVpp	60W
AS60N-30	30V	2A	85%	±5%	200mVpp	60W

▶ Safety Approval

CB

PAW024 Series
Single output 24 Watts

▶ Electrical Specifications

Input Voltage Range:
90 ~ 264VDC, 47 ~ 63 Hz, 0.5A
Power Efficiency:
Average > 78%
Operating Temperature Range:
-0 ~ 40˚C at full load
Operating Humidity:
10 ~ 90%
Withstand Voltage:
I/P ~ O/P: 3KV AC, I/P ~ FG: 1.5KV AC
Output Plus type:
2.1 x 5.5 x 9 mm, Inner+, barrel type
Leakage Current:
<0.25mA / 240V AC
MTBF:
400K hrs min.MIL-HDBK-217F (25˚C)
Dimension:
72 × 52 × 34 mm

▶ Output Loading

- 24W (AC Plug Type: US / UK / EU / AU)

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
PAW024-12	12V	2A	77%	±5%	120mVpp	24W
PAW024-24	24V	1A	78%	±3%	240mVpp	24W

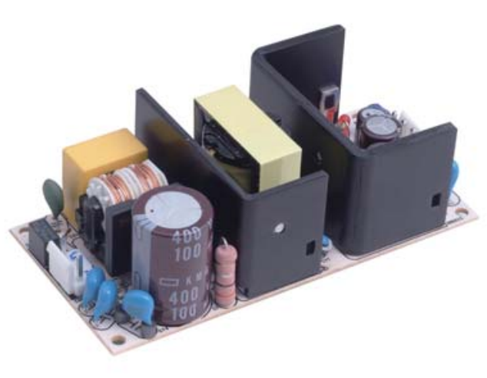
▶ Safety Approval

CB

Open Frame Type

OS45N / 60N Series
Single output 45/60 Watts

For industry Field



▶ Electrical Specifications

Input Voltage Range:	90 ~ 264V AC, 47 ~ 63 Hz, 2A.
Power Efficiency:	Average > 84%.
Operating Temperature Range:	-20 ~ 50°C at full load.
Operating Humidity:	10 ~ 90%.
Input / Output connection:	JST connector or equivalent 3.96 pitch
Withstand Voltage:	I/P ~ O/P: 3KV AC, I/P ~ FG: 1.5KV AC
Leakage Current:	<0.75 mA / 240V AC
MTBF:	200K hrs min.MIL-HDBK-217F(25˚C)
Dimension:	101 × 50.8 × 30 mm (2 × 4 inch)

▶ Safety Approval

E310720 CB

▶ Output Loading

- 45W

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
OS45N-3.3	3.3V	8A	76%	±2%	80mVpp	26.4 W
OS45N-05	5V	8A	80%	±2%	80mVpp	40 W
OS45N-12	12V	4A	83%	±2%	120mVpp	45 W
OS45N-15	15V	3.2A	84%	±2%	150mVpp	45 W
OS45N-24	24V	2A	85%	±1%	200mVpp	45 W
OS45N-48	48V	1A	86%	±1%	300mVpp	45 W

- 60W

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
OS60N-3.3	3.3V	10A	76%	±2%	80mVpp	33 W
OS60N-05	5V	10A	79%	±2%	80mVpp	50 W
OS60N-12	12V	5A	83%	±2%	120mVpp	60 W
OS60N-15	15V	4A	84%	±2%	150mVpp	60 W
OS60N-24	24V	2.5A	85%	±1%	240mVpp	60 W
OS60N-48	48V	1.25A	86%	±1%	300mVpp	60 W

ES320 / 360 Series Enolosure Type
Single Output 320 / 360 Watts

For industry Field

▶ Electrical Specifications

Input Voltage Range:	90 ~ 264V AC, 47~63 Hz, 5A.
Power Efficiency:	Average > 82%.
Operating Temperature Range:	-20 ~ 50°C at full load.
Operating Humidity:	10 ~ 90%.
Input / Output connection:	Terminal block with 9.5 pitch
Withstand Voltage:	I/P ~ O/P: 3KV AC, I/P ~ FG:1.5KV AC
Leakage Current:	<1 mA / 240V AC
MTBF:	200K hrs min.MIL-HDBK-217F(25˚C)
Dimension:	216 x 115 x 50 mm

▶ Safety Approval

E310720 CB

▶ Output Loading

- 320W (with Dual Fan design)

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
ES320P-3.3	3.3V	55A	76%	±2%	100mVpp	180 W
ES320P-5	5V	55A	81%	±2%	100mVpp	275 W
ES320P-12	12V	25A	85%	±1%	120mVpp	300 W
ES320P-15	15V	20A	86%	±1%	150mVpp	300 W
ES320P-24	24V	13A	87%	±1%	150mVpp	312 W
ES320N-48	48V	6.7A	88%	±1%	240mVpp	320 W

- 360W (with Dual Fan design)

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
ES360P-3.3	3.3V	60A	76%	±2%	100mVpp	198 W
ES360P-5	5V	60A	81%	±2%	100mVpp	300 W
ES360P-12	12V	30A	85%	±1%	120mVpp	360 W
ES360P-15	15V	24A	86%	±1%	150mVpp	360 W
ES360P-24	24V	15A	87%	±1%	150mVpp	360 W
ES360N-48	48V	7.5A	88%	±1%	240mVpp	360 W

Battery Charger

12V / 24V Charger

CZ1204 / CZ1206 / CZ2404 Series
12V / 24V Lead-Acid Battery Charger

▶ Features

- Design with Switching Mode Circuit
- Compact size and light weight
- High efficiency over 80%
- Three options for charging current
- Plastic cover of insulation with dust
- Built-in Microcontroller and protections against abnormal situations
- 6 charging steps with reviving and extending battery life time functions
- RoHS compliance and 2 years warranty

▶ Electrical Specifications

Input Voltage Range:	90 ~ 130V AC, 3A / 180 ~ 264V AC, 1.5A
Power Efficiency:	Average > 80%
Operating Temperature Range:	-20 ~ 50˚C at full load.
Operating Humidity:	10 ~ 90%
Withstand Voltage:	I/P ~ O/P: 3KV AC, I/P ~ FG: 1.5KV AC
Leakage Current:	<1mA/240V AC
MTBF:	100K hrs min.MIL-HDBK-217F(25˚C)
Dimension:	200 × 90 × 45 mm

▶ Safety Approval

CB N136 CONFORMS TO ANSI/UL STD 1236

▶ Output Loading

- Model: CZ1204: 12V / 4A

Charge Mode (selectable)	Battery Size (Typical)	Charge Time(Typical)	Maintenance Size
1A for Scooter / ATV (Slow)	3 ~ 14 Ah (7 Ah)	3 ~ 14 hrs (7 hrs)	Max 60 Ah
2A for Motorcycle (Medium)	7 ~ 32 Ah (14Ah)	3 ~ 16 hrs (7 hrs)	Max 100 Ah
4A for Car / Van (Fast)	20 ~ 85 Ah (55Ah)	5 ~ 22 hrs (14 hrs)	Max 150 Ah

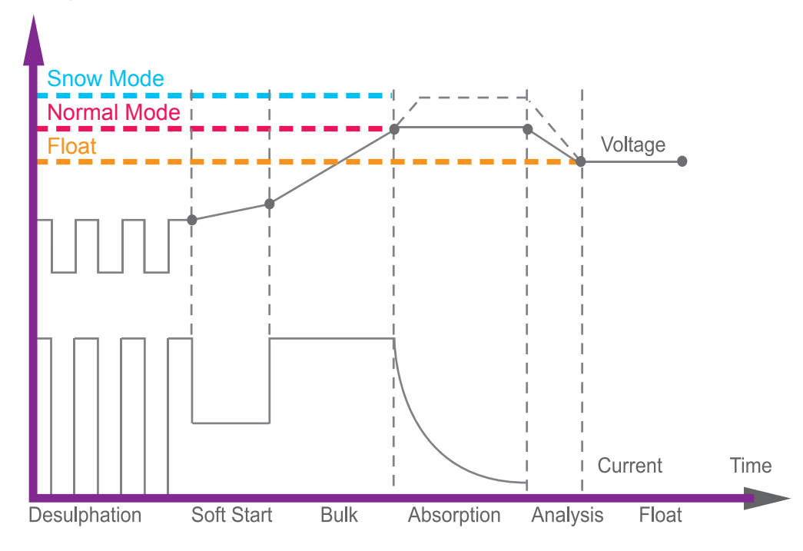
- Model: CZ1206: 12V / 6A

Charge Mode (selectable)	Battery Size (Typical)	Charge Time(Typical)	Maintenance Size
1A for Motorcycle (Slow)	3 ~ 20 Ah (7 Ah)	3 ~ 20 hrs (7 hrs)	Max 60 Ah
4A for Car / Van (Medium)	14 ~ 80 Ah (55Ah)	3 ~ 20 hrs (14 hrs)	Max 150 Ah
6A for Truck / RV (Fast)	20 ~ 150 Ah (95Ah)	3 ~ 25 hrs (16 hrs)	Max 200 Ah

- Model: CZ2404: 24V / 4A

Charge Mode (selectable)	Battery Size (Typical)	Charge Time(Typical)	Maintenance Size
1A for Bicycle (Slow)	3 ~ 14 Ah (7 Ah)	3 ~ 14 hrs (7 hrs)	Max 60 Ah
2A for Motorcycle (Medium)	7 ~ 32 Ah (20Ah)	3 ~ 16 hrs (14 hrs)	Max 100 Ah
6A for Scooter (Fast)	20 ~ 85 Ah (50Ah)	5 ~ 22 hrs (16 hrs)	Max 150 Ah

▶ Charge Curve



LED Driver

01 Type

04 Type

08 Type

02 Type

05 Type

15 Type

03 Type

06 Type

▶ Features

- Universal AC input 90~264V AC.
- Meet RoHS requirements
- Class II power (w/o earth pin)
- Protections: SCP / OVP / OLP
- Suitable for outdoor use.
- LC series design with Constant Current
- LV series design with Constant Voltage
- Plastic cover of Insulation with IP65 level.
- 100% Burn-In test and 1 year warranty.

▶ Electrical Specifications

Input Voltage Range :
90~264V AC, 47 ~ 63 Hz, 0.6A
Power Efficiency :
Average > 75%
Operating Temperature Range:
-10 ~ 40˚C at full load.
Operating Humidity:
10 ~ 90%
Withstand Voltage:
I/P~O/P: 3KV AC, I/P~FG: 1.5KV AC
Leakage Current:
<0.75mA/240V AC
MTBF:
70k hrs min.MIL-HDBK-217F (25˚C)

▶ Safety Approval

E310720 IP65

General Types

▶ Output Loading

- 3 ~ 12W (Constant Voltage Models)

Model No.	Output Voltage	Rated Current	Connector type	Tolerance (V)	Dimension	Watts
LV2512-01	12V DC	250mA	Scerw	±10%	42 × 40 × 21 mm	3W
LV5012-01	12V DC	500mA	Scerw	±10%	42 × 40 × 21 mm	6W
LV1224-01	24V DC	120mA	Scerw	±10%	42 × 40 × 21 mm	3W
LV2524-01	24V DC	250mA	Scerw	±10%	42 × 40 × 21 mm	6W
LV2512-02	12V DC	250mA	Stripped	±10%	70 × 35 × 23 mm	3W
LV5012-02	12V DC	500mA	Stripped	±10%	70 × 35 × 23 mm	6W
LV8312-02	12V DC	830mA	Stripped	±10%	70 × 35 × 23 mm	10W
LV1224-02	24V DC	120mA	Stripped	±10%	70 × 35 × 23 mm	3W
LV2524-02	24V DC	250mA	Stripped	±10%	70 × 35 × 23 mm	6W
LV4124-02	24V DC	410mA	Stripped	±10%	70 × 35 × 23 mm	10W
LV2512-03	12V DC	250mA	Scerw	±10%	86 × 45 × 26 mm	3W
LV5012-03	12V DC	500mA	Scerw	±10%	86 × 45 × 26 mm	6W
LV8312-03	12V DC	830mA	Scerw	±10%	86 × 45 × 26 mm	10W
LV1224-03	24V DC	120mA	Scerw	±10%	86 × 45 × 26 mm	3W
LV2524-03	24V DC	250mA	Scerw	±10%	86 × 45 × 26 mm	6W
LV4124-03	24V DC	410mA	Scerw	±10%	86 × 45 × 26 mm	10W
LVA012-05	12V DC	1000mA	Stripped	±10%	65 × 44 × 28 mm	12W
LV5024-05	24V DC	500mA	Stripped	±10%	65 × 44 × 28 mm	12W

- 1 ~ 18W (Constant Current Models)

Model No.	Output Voltage	Rated Current	Connector type	Tolerance (A)	Dimension	Watts
LC3512-01	3-12V DC	350mA	Scerw	±6%	42 × 40 × 21 mm	1~3W
LC7012-01	3-12V DC	700mA	Scerw	±6%	42 × 40 × 21 mm	3 ~ 6W
LC3512-02	3-12V DC	350mA	Stripped	±6%	70 × 35 × 23 mm	1 ~ 3W
LC3536-02	3-36V DC	350mA	Stripped	±6%	70 × 35 × 23 mm	1 ~ 8W
LC7012-02	3-12V DC	700mA	Stripped	±6%	70 × 35 × 23 mm	3 ~ 6W
LC7021-02	3-21V DC	700mA	Stripped	±6%	70 × 35 × 23 mm	3 ~ 9W
LC3512-03	3-12V DC	350mA	Scerw	±6%	86 × 45 × 26 mm	1 ~ 3W
LC3536-03	3-36V DC	350mA	Scerw	±6%	86 × 45 × 26 mm	1 ~ 8W
LC7012-03	3-12V DC	700mA	Scerw	±6%	86 × 45 × 26 mm	3 ~ 6W
LC7021-03	3-21V DC	700mA	Scerw	±6%	86 × 45 × 26 mm	3 ~ 9W
LC3554-04	10-54V DC/PFC	350mA	Scerw	±6%	141 × 45 × 26mm	3 ~ 16W
LC7034-04	3-34V DC/PFC	700mA	Scerw	±6%	141 × 45 × 26 mm	3 ~ 18W
LC3512-06	3-12V DC	350mA	Stripped	±6%	46 × 43 × 23 mm	2W
LC7012-06	3-12V DC	700mA	Stripped	±6%	46 × 43 × 23 mm	3W
LC3512-08	3-12V DC	350mA	Stripped	±6%	37 × 29 × 22 mm	1 ~ 3W
LC3536-08	3-36V DC	350mA	Stripped	±6%	37 × 29 × 22 mm	1 ~ 8W
LC7012-08	3-12V DC	700mA	Stripped	±6%	46 × 43 × 23 mm	3 ~ 6W
LC7021-08	3-21V DC	700mA	Stripped	±6%	46 × 43 × 23 mm	3 ~ 9W
LC3554-15	10-54V DC	350mA	Stripped	±6%	85 × 54 × 32.5 mm	16W
LC7026-15	3-26V DC	700mA	Stripped	±6%	85 × 54 × 32.5 mm	18W

LED Driver

Dimming Type

Dimming Type 6 / 9 Watts
Constant Current Models + Dimming Function

03 Type
6W

04 Type
9W

▶ Features

- DC output with Dimming function control
- Dimming Range 10~100%
- Universal input 100~240V AC
- Suitable for High power LED application
- Output with Screw type terminal connector
- Protections:SCP/OVP/OTP

▶ Output Loading

- 6 Watts

Model No.	Output Voltage	Rated Current	Connector type	Tolerance(A)	Dimension	Dimming Control by	Watts
LC3522-03V	22V	350mA	Scerw	±6%	86 x 45 x 26mm	0~10V Control	6W
LC3522-03W	22V	350mA	Scerw	±6%	86 x 45 x 26mm	PWM Control	6W

- 9 Watts

Model No.	Output Voltage	Rated Current	Connector type	Tolerance(A)	Dimension	Dimming Control by	Watts
LC3536-04D	36V	350mA	Scerw	±6%	141 x 45 x 26mm	0~10V or 1~10V electronic potentiometer and PWM Controller (5~24V/20 ~20KHz)	9W
LC7012-04D	12V	700mA	Scerw	±6%	141 x 45 x 26mm		9W

AC Dimming Coming Soon..

LED Driver

DC-DC Driver

DC-DC LED Driver

▶ Features

- For High Brightness Light-Emitting Diode products
- DC 12V/24V input
- Fully isolated plastic case with stripped
- Built-in Constant Current limiting design
- Operation from -10°C ~ 40°C full load
- Protections: OVP / OLP/ SCP
- 1 year warranty

▶ Output Loading

Model No.	Intput Voltage	Output Voltage	Rated Current	Connector type	Tolerance(A)	Dimension	Watts
LD3510-12	12V	3~10V	350mA	Stripped	10%	27 x 24 x 28 mm	2W
LD7012-12	12V	3~12V	650mA	Stripped	10%	27 x 24 x 28 mm	9W
LD3508-24	24V	3~8V	350mA	Stripped	10%	27 x 24 x 28 mm	2W
LD3520-24	24V	3~20V	350mA	Stripped	10%	27 x 24 x 28 mm	5W
LD7012-12	12V	3~12V	650mA	Stripped	10%	27 x 24 x 28 mm	9W

DC-DC LED Constant Current Regulator

Step Down Type

DC-DC LED DRIVER
GP-LD3528-0M
GlacialPower
0910LF

▶ Features

- RoHS-compliant 14 Pin DIL Package (Row Dist:5.08mm)
- Constant Current Output (+/-5% Output Current Accuracy)
- Wide Input Voltage Range:7V to 30V (40V for 0.5sec.)
- Driver LED Strings of up to 28V (2V to 28V)
- High Efficiency (up to 95%)
- PWM/Digital Dimming and Analog Voltage Dimming
- Open and Short LED Protection
- -40°C ~ 85°C Operation Temperature Range
- 1 year warranty

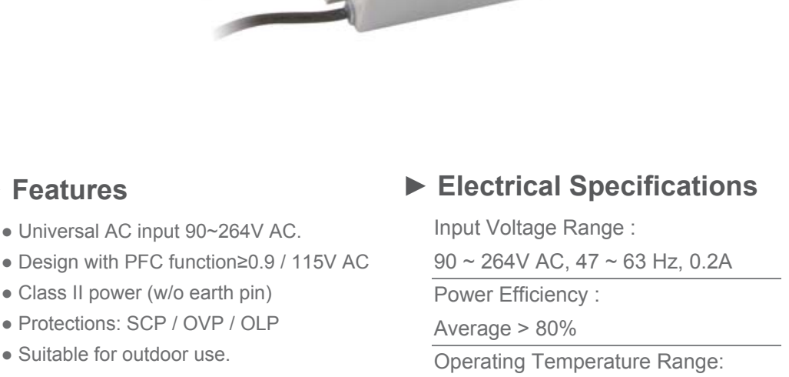
▶ Output Loading

Model No.	Intput Voltage	Output Voltage	Rated Current	Connector type	Tolerance(A)	Dimension	Watts
LD3528-0M	7~30V	2~28V	350mA	Module	5%	20 x 10 x 7 mm	8W
LD7028-0M	7~30V	2~28V	700mA	Module	7%	24 x 14 x 10 mm	20W
LDA028-0M	7~30V	2~28V	1000mA	Module	7%	24 x 14 x 10 mm	24W

LED Driver

PFC Function Type

LS10P / 35P Series
Single Output 12 / 33 Watts
(With PFC)



▶ Features

- Universal AC input 90~264V AC.
- Design with PFC function≥0.9 / 115V AC
- Class II power (w/o earth pin)
- Protections: SCP / OVP / OLP
- Suitable for outdoor use.
- Constant current design for Hi-Power LED applications
- Plastic cover of Insulation with IP67 level.
- 100% Burn-In test and 1 year warranty.
- Dimming control (PWM / DC) available

▶ Electrical Specifications

Input Voltage Range :
90 ~ 264V AC, 47 ~ 63 Hz, 0.2A
Power Efficiency :
Average > 80%
Operating Temperature Range:
-10 ~ 70˚C at full load.
Operating Humidity:
20 ~ 90%
Withstand Voltage:
I/P~O/P: 3.6KV AC
Leakage Current:
<0.25mA / 230V AC
MTBF:
200k hrs min.MIL-HDBK-217F(25˚C)

▶ Output Loading

12W (Constant Current Models)

Model No.	Output Voltage	Rated Current	Efficiency	Connector type	Tolerance (A)	Dimension	Watts
LS10P-36	13-36V DC	350mA	83%	Stripped	±10%	108 × 30.5 × 26 mm	12W
LS10P-18	7-18V DC	700mA	81%	Stripped	±10%	108 × 30.5 × 26 mm	12W

12W (Constant Current Models + Dimming Function)

Model No.	Output Voltage	Rated Current	Efficiency	Connector type	Tolerance (A)	Dimension	Watts
LS10P-35A	4-35V DC	350mA	80%	Stripped	±10%	108 × 30.5 × 26 mm	12W
LS10P-17A	4-17V DC	700mA	80%	Stripped	±10%	108 × 30.5 × 26 mm	12W

Dimming Control:
1.PWM dimming: 0<Vadj<10V(100 ~ 3K Hz)
2.Analog Dimming Control :control by external voltage 0 ~ 10V DC

IP67

33W (Constant Current Models)

Model No.	Output Voltage	Rated Current	Efficiency	Connector type	Tolerance (A)	Dimension	Watts
LS35P-30	5-31V DC	1050mA	86%	Stripped	±10%	163 × 45 × 35 mm	33W
LS35P-48	5-48V DC	700mA	87%	Stripped	±10%	163 × 45 × 35 mm	33W

29W (Constant Current Models + Dimming Function)

Model No.	Output Voltage	Rated Current	Efficiency	Connector type	Tolerance (A)	Dimension	Watts
LS35P-42A	5-42V DC	700mA	84%	Stripped	±5%	163 × 45 × 35 mm	29W

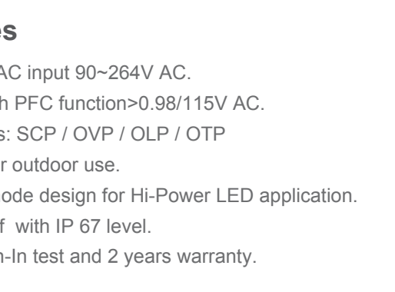
Dimming Control:
1.PWM dimming: 0<Vadj<10V(100 ~ 3K Hz)
2.Analog Dimming Control :control by external voltage 0 ~ 10V DC

IP67

LED Driver

PFC Function Type

LS50P /70P /100P /150P Series
Single Output
(With PFC)



▶ Features

- Universal AC input 90~264V AC.
- Design with PFC function>0.98/115V AC.
- Protections: SCP / OVP / OLP / OTP
- Suitable for outdoor use.
- CC / CV mode design for Hi-Power LED application.
- Waterproof with IP 67 level.
- 100% Burn-In test and 2 years warranty.

▶ Electrical Specifications

Input Voltage Range:	90~264V AC,47~63Hz, 0.6A.
Power Efficiency:	Average >86
Operating Temperature Range:	-30~55 ℃ at full load.
Operating Humidity:	20~90%.
Withstand Voltage:	I/P~O/P: 3KVAC , I/P~FG:1.5KVAC.
Leakage Current:	0.25~0.75 mA/230V AC.
MTBF:	200~400k hrS min.MIL-HDBK-217F(25℃)

▶ Output Loading

- 50W - CC,CV MODE DESIGN

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance(A)	Dimension	Watts
LS050P-24	24V	2.1A	86%	5%	166 x 68 x 39mm	50W
LS050P-48	48V	1A	86%	5%	166 x 68 x 39mm	48W

- 70W - CC,CV MODE DESIGN

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance(A)	Dimension	Watts
LS070P-24	24V	3.2A	86%	5%	166 x 68 x 39mm	77W
LS070P-28	28V	2.45A	86%	5%	166 x 68 x 39mm	68W
LS070P-36	36V	2.1A	86%	5%	166 x 68 x 39mm	75W
LS070P-48	48V	1.46A	86%	5%	166 x 68 x 39mm	70W

- 100W - CC,CV MODE DESIGN

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance (A)	Dimension	Watts
LS100P-12	12V	8.3A	88%	5%	222*68*39mm	100W
LS100P-24	24V	4.2A	90%	5%	222*68*39mm	100W
LS100P-36	36V	2.8A	90%	5%	222*68*39mm	100W
LS100P-48	48V	2.1A	90%	5%	222*68*39mm	100W
LS100P-57	57V	1.75A	90%	5%	222*68*39mm	100W

- 150W - CC,CV MODE DESIGN

Model No.	Output Voltage	Rated Current	Efficiency	Tolerance (A)	Dimension	Watts
LS150P-15	15V	10A	88%	5%	222*68*39mm	150W
LS150P-24	24V	6.3A	90%	5%	222*68*39mm	150W
LS150P-36	36V	4.26A	90%	5%	222*68*39mm	150W
LS150P-48	48V	3.2A	90%	5%	222*68*39mm	150W
LS150P-54	54V	2.8A	90%	5%	222*68*39mm	150W

IP67