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**GlacialTech®**  
*Enlighten Your Humanity*



# GlacialTech Profile

GlacialTech Inc. was established in June 2001 by a team of 8 world-class researchers (PHDs) and three factory owners. At the beginning, the technological areas of expertise include specialized thermal theory, soldering and mounting technologies, mechanism design, test and verification environment build-up and advanced conduct material development. Nowadays, the core technology and product lines expand to the SMPS (Switch Mode Power Supply) and LED related solutions.

GlacialTech's three principle design philosophies: Price performance, noise performance and weight performance. and GlacialTech is committed to using green materials for its product design and construction and to perfecting green manufacturing processes in manufacturing its products.

As a total thermal solution provider, GlacialTech is committed to bringing increased value to customers through the creation of light weight cost effective systems, and a quiet working environment with an optimal price performance benefit.

There are 3 product lines is under the GlacialTech Inc.:  
 GlacialTech's brand name is a component provider to provide diversified solutions in fields of cooling.  
 GlacialPower focus on the SMPS (Switched Mode Power Suppler) and chassis for consuming and industrial applications.

Having established the strong relationships with thermal, SMPS and mechanism technology leaders worldwide, GlacialTech leverages world-class engineering, efficient manufacturing and highest-quality materials to provide the products with an optimal balance of performance and value to high brightness, low power LED lighting solutions for indoor, outdoor and other customized applications is under the GlacialLight brand.

Having acquired ISO 9001 and 14001, GlacialTech commits itself to using green materials for its products designs and to perfecting green manufacturing processes in manufacturing its products.



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Power Your Idea

- 18 · PC Power
- Combo Type
- DeskTop Type
- WallMount Type
- Open Frame Type
- Battery Charger
- LED Driver



Lighting You Always

- 34 · Indoor LED
- GL-MR16 Series
- GL-BR20 Series
- GL-BR30 Series
- GL-BR40 Series
- GL-BR08 Series
- GL-GB16 Series
- GL-T8 Tube Series-High Power
- GL-T8 Tube Series-Low Power
- GL-Light Bar Series
- Outdoor LED
- GL-SP07 Series
- GL-SP15 Series
- GL-SP15 with Sensor and CCD Series
- GL-SP30 Series
- GL-SP60 Series
- Dynamo2 LED Torch
- PalmSiren Dyamo3



- 44 · PC Case Fan
- Notebook PC Cooling Pad
- Thermal Grease
- HDD Cooler
- Case FAN



GlacialTech®

Inspiring Cooling Technology



[www.GlacialTech.com](http://www.GlacialTech.com)

## Intel CPU Coolers

### Igloo 5058 Series

#### ► CPU Support

- Intel® Celeron Processor Family 440 (65W)
- Intel® Core™ 2 Duo Desktop Processor (65W)
- Intel® Core™ 2 Quad Processor (95W)

**Intel® LGA775**

#### ► Specifications

- Cooler Dimension (mm): ø89 x 55
- Cooler Weight (gram): 263
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 80 x 80 x 25



Fan Model	Igloo 5058 Light / (E)	Igloo 5058 / (E)	Igloo 5058 PWM / (E)
Speed (RPM)	2,600 (±10%)	3,200 (±10%)	800(± 300) ~ 3,600 (± 10 %)
Airflow (CFM)	35.5 (±10%)	44.1 (±10%)	Max. 50.1 (±10%)
Noise (dBA)	25	32	15~38

### Igloo 5063 Series

#### ► CPU Support

- Intel® Celeron Processor Family 440 (65W)
- Intel® Core™ 2 Duo Desktop Processor (65W)
- Intel® Core™ 2 Quad Processor (95W)

**Intel® LGA775**

#### ► Specifications

- Cooler Dimension (mm): ø89 x 67
- Cooler Weight (gram): 341
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 80 x 80 x 25



Fan Model	Igloo 5063 Silent / (E)	Igloo 5063 Light / (E)	Igloo 5063 / (E)	Igloo 5063 PWM / (E)
Speed (RPM)	2,000 (±10%)	2,600 (±10%)	3,200 (±10%)	800(± 300) ~ 3,600 (± 10 %)
Airflow (CFM)	26.0 (±10%)	35.5 (±10%)	44.1 (±10%)	Max. 50.1 (±10%)
Noise (dBA)	20	25	32	15~38



## Igloo 5063 CUV Series

### ► CPU Support

- Intel® Celeron Processor Family 440 (65W)
- Intel® Core™ 2 Duo Desktop Processor (65W)
- Intel® Core™ 2 Quad Processor (95W)

**Intel® LGA775**

### ► Specifications

- Cooler Dimension (mm): ø89 x 67
- Cooler Weight (gram): 380
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 80 x 80 x 25

Fan	Model	Igloo 5063 CUV Silent / (E)	Igloo 5063 CUV Light / (E)	Igloo 5063 CUV / (E)	Igloo 5063 CUV PWM / (E)
Speed (RPM)		2,000 (±10%)	2,600 (±10%)	3,200 (±10%)	800 (±300) ~ 3,600 (±10 %)
Airflow (CFM)		26.0 (±10%)	35.5 (±10%)	44.1 (±10%)	Max. 50.1 (±10%)
Noise (dBA)		20	25	32	15 ~ 38



## Igloo 6100 Series

### ► CPU Support

- Intel® Core™ i7 Processor i7-960, i7-950, i7-940, i7-920 (130W)

**Intel® LGA1366**

### ► Specifications

- Cooler Dimension (mm): ø100 x 68
- Cooler Weight (gram): 411
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 92 x 92 x 25

Fan	Model	Igloo 6100 Silent / (E)	Igloo 6100 Light / (E)	Igloo 6100 / (E)	Igloo 6100 PWM / (E)
Speed (RPM)		1,600 (±10%)	2,000 (±10%)	2,400 (±10%)	800 (±300 rpm) ~3,000 (±10%)
Airflow (CFM)		29.6 (±10%)	37.3 (±10%)	44.1 (±10%)	54.5 (Max.)
Noise (dBA)		23	28	33	38 (Max.)

## Igloo 6100 CUV Series

### ► CPU Support

- Intel® Core™ i7 Processor i7-960, i7-950, i7-940, i7-920 (130W)

**Intel® LGA1366**

### ► Specifications

- Cooler Dimension (mm): ø100 x 68
- Cooler Weight (gram): 450
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 92 x 92 x 25



Fan	Model	Igloo 6100 CUV Silent / (E)	Igloo 6100 CUV Light / (E)	Igloo 6100 CUV / (E)	Igloo 6100 CUV PWM / (E)
Speed (RPM)		1,600 (±10%)	2,000 (±10%)	2,400 (±10%)	800 (±300 rpm) ~3,000 (±10%)
Airflow (CFM)		29.6 (±10%)	37.3 (±10%)	44.1 (±10%)	54.5 (Max.)
Noise (dBA)		23	28	33	38 (Max.)



## Igloo 1050 Series

### ► CPU Support

- 73 Watts: i5-670, i5-660, i5-650, i3-540, i3-530
- 82 Watts: i5-750S, i7-860S
- 87 Watts: i5-661
- 95 Watts: i5-750, i7-870, i7-860

**Intel® LGA1156**

### ► Specifications

- Cooler Dimension (mm): ø95 x 57
- Cooler Weight (gram): 310
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 80 x 80 x 25

Fan	Model	Igloo 1050 Light / (E)	Igloo 1050 / (E)	Igloo 1050 PWM / (E)
Speed (RPM)		2,600 (±10%)	3,200 (±10%)	800 (±300 rpm) ~ 3,600 (±10%)
Airflow (CFM)		35.5 (±10%)	44.1 (±10%)	50 (Max.)
Noise (dBA)		25	32	38 (Max.)



## Igloo 1100 Series

### ► CPU Support

- 73 Watts: i5-670, i5-660, i5-650, i3-540, i3-530
- 82 Watts: i5-750S, i7-860S
- 87 Watts: i5-661
- 95 Watts: i5-750, i7-870, i7-860

**Intel® LGA1156**

### ► Specifications

- Cooler Dimension (mm): ø95 x 67
- Cooler Weight (gram): 380
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 80 x 80 x 25

Fan	Model	Igloo 1100 Silent / (E)	Igloo 1100 Light / (E)	Igloo 1100 / (E)	Igloo 1100 PWM / (E)
Speed (RPM)		2,000 (±10%)	2,600 (±10%)	3,200 (±10%)	800 (±300 rpm) ~3,600 (±10%)
Airflow (CFM)		26 (±10%)	35.5 (±10%)	44.1 (±10%)	50 (Max.)
Noise (dBA)		20	25	32	38 (Max.)

## Igloo 1100 CU Series

### ► CPU Support

- 73 Watts: i5-670, i5-660, i5-650, i3-540, i3-530
- 82 Watts: i5-750S, i7-860S
- 87 Watts: i5-661
- 95 Watts: i5-750, i7-870, i7-860

**Intel® LGA1156**

### ► Specifications

- Cooler Dimension (mm): ø95 x 67
- Cooler Weight (gram): 430
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 80 x 80 x 25



Fan	Model	Igloo 1100 CU Silent / (E)	Igloo 1100 CU Light / (E)	Igloo 1100 CU / (E)	Igloo 1100 CU PWM / (E)
Speed (RPM)		2,000 (±10%)	2,600 (±10%)	3,200 (±10%)	800 (±300 rpm) ~3,600 (±10%)
Airflow (CFM)		26 (±10%)	35.5 (±10%)	44.1 (±10%)	50 (Max.)
Noise (dBA)		20	25	32	38 (Max.)

# AMD CPU Coolers

## Igloo 7223 Series



### ► CPU Support

- Sempron™
- Athlon™ 64 FX
- Phenom™ X2 Quad-Core
- Dual-Core Opteron™
- Third-Generation Opteron™
- Athlon™ 64
- Athlon™ 64 X2 Dual-Core
- Opteron™
- Second-Generation Opteron™

### ► Specifications

- Wattage Support (w): Up to 89
- Cooler Dimension (mm): 77 x 67 x 52
- Cooler Weight (gram): 256
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 70 x 70 x 15

Model	Igloo 7223 Light / (E)	Igloo 7223 / (E)	Igloo 7223 PWM / (E)
Fan			
Speed (RPM)	2,600 (±10%)	3,200 (±10%)	1,200 (±300) ~ 3,800 (±10%)
Airflow (CFM)	18.4 (±10%)	22.4 (±10%)	Max. 27.6 (±10%)
Noise (dBA)	21	26	Max. 34

## Igloo 7312 Silent / (E)



### ► CPU Support

- Sempron™
- Athlon™ 64
- Athlon™ 64 FX
- Athlon™ 64 X2 Dual-Core
- Phenom™ X2 Quad-Core
- Opteron™
- Dual-Core Opteron™
- Second-Generation Opteron™
- Third-Generation Opteron™

### ► Specifications

- Wattage Support (w): Up to 89
- Cooler Dimension (mm): 89 x 89 x 55
- Cooler Weight (gram): 263

Fan	Bearing Type	Rated Voltage	Dimension (mm)	Speed (RPM)	Airflow (CFM)	Noise (dBA)
	1B1S / Entering Bearing	DC 12V	80 x 80 x 25	2,600 (±10%)	35.5 (±10%)	25

## Igloo 7321 Series

### ► CPU Support

- Sempron™
- Athlon™ 64
- Athlon™ 64 FX
- Athlon™ 64 X2 Dual-Core
- Phenom™ X2 Quad-Core
- Phenom™ X3 Triple-Core
- Phenom™ X4 Quad-Core
- Phenom™ II X3 Triple-Core
- Phenom™ II X4 Triple-Core
- Opteron™
- Dual-Core Opteron™
- Second-Generation Opteron™
- Third-Generation Opteron™

### ► Specifications

- Cooler Dimension (mm): 85 x 83.5 x 71
- Cooler Weight (gram): 384
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 80 x 80 x 25



Model	Igloo 7321 Silent / (E)	Igloo 7321 Light / (E)	Igloo 7321 / (E)	Igloo 7321 PWM / (E)
Wattage Support (W)	Up to 89	Up to 95	Up to 104	Up to 104
Fan	Speed (RPM)	2,000 (±10%)	2,600 (±10%)	3,200 (±10%)
	Airflow (CFM)	26.0 (±10%)	35.5 (±10%)	44.1 (±10%)
	Noise (dBA)	20	25	32
				15 ~ 38

## Igloo 7321 TC Series

### ► CPU Support

- Sempron™
- Athlon™ 64
- Athlon™ 64 FX
- Athlon™ 64 X2 Dual-Core
- Phenom™ X2 Quad-Core
- Phenom™ X3 Triple-Core
- Phenom™ X4 Quad-Core
- Phenom™ II X3 Triple-Core
- Phenom™ II X4 Triple-Core
- Opteron™
- Dual-Core Opteron™
- Second-Generation Opteron™
- Third-Generation Opteron™

### ► Specifications

- Cooler Dimension (mm): 85 x 83.5 x 71
- Cooler Weight (gram): 384
- Fan Bearing Type: 1B1S / Entering Bearing
- Fan Rated Voltage: DC 12V
- Fan Dimension (mm): 80 x 80 x 25



Model	Wattage Support (W)	Fan		
		Speed (RPM)	Airflow (CFM)	Noise (dBA)
Igloo 7321 TC / (E)	Up to 104	1,800 ~ 3,000 (±10%)	21.4 ~ 41.3 (±10%)	19 ~ 31

# Multiple Platforms CPU Coolers

## Igloo 5610 Terminator(China Only) Igloo 5610 Plus Silent & PWM

### ► CPU Support

#### Intel CPU Clock Speed (Max.)

##### Intel LGA775

- Intel® Core™2 Quad Processor (Up to 95 watts)
- Intel® Core™2 Extreme Processor (Up to 130 watts)
- Intel® Core™2 Duo Processor (Up to 65 watts)
- Intel® Celeron® D Processor (Up to 86 watts)
- Intel® Celeron® Processor (Up to 65 watts)

##### Intel LGA1156

- Intel® Core™ i5 Processor (Up to 95 watts)
- Intel® Core™ i3 Processor (Up to 73 watts)
- Intel® Core™ i7 Processor (Up to 95 watts)

##### Intel LGA1366

- Intel® Core™ i7 Processor (Up to 130 watts)
- Intel® Core™ i7 Processor Extreme Edition (Up to 130 watts)

#### AMD CPU Clock Speed (Max.)

- Athlon II X3 (Up to 2.9 GHz/95W/AM3)
- Athlon™ II X4 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X4 (Up to 3.4 GHz/140W/AM3, AM2+)
- Phenom™ II X3 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X2 (Up to 3.1 GHz/80W/AM3)
- Phenom™ X4 (Up to 2.6 GHz/140W/ AM2+)
- Phenom™ X3 (Up to 2.5 GHz/95W/ AM2+, 940)
- Athlon™ II X2 (Up to 3 GHz/65W/ AM3)
- Athlon™ X2 (Up to 3.2 GHz/125W/ AM2, AM2+, 939)
- Athlon™ (Up to 2.8 GHz/89W/ AM2, 939, 754)
- Sempron™ (Up to 2.7 GHz/62W/ AM2, AM3, 754)



5610 Terminator



5610 Plus Silent



5610 Plus PWM

**i3&i5&i7  
Ready**

**MOD  
Designed  
(Two Fans Option)**

Model	Igloo 5610 Terminator	Igloo 5610 Plus Silent	Igloo 5610 Plus PWM	
<b>Dimension (mm)</b>	90 (L) × 103 (W) × 139 (H)	90 (L) × 96 (W) × 139 (H)	65 (L) × 96 (W) × 139 (H)	
<b>Weight (grams)</b>	395	460	365	
<b>Fan</b>	Bearing Type	Entering Bearing	Entering Bearing	
	Rated Voltage	DC 12 V	DC 12 V	DC 12 V
	Dimension (mm)	92 × 92 × 25	92 × 92 × 25 dual fans	92 × 92 × 25 dual fans
	Speed (RPM)	1600 (± 10%)	1200 (± 10%) per fan	800 (± 300 rpm) ~2700 (± 10%)
	Airflow (CFM)	32 (± 10%)	23 (± 10%) per fan	49 (± 10%)
	Noise (dBA)	20 (Max.)	17.7 per fan	34.2 (Max.)
<b>Interface Material</b>	High Efficiency Thermal Compound	Interface Material	High Efficiency Thermal Compound	

## Igloo 5710 Plus Silent & PWM

### ► CPU Support

#### Intel CPU Clock Speed (Max.)

##### Intel LGA775

- Intel® Core™2 Quad Processor (Up to 95 watts)
- Intel® Core™2 Extreme Processor (Up to 130 watts)
- Intel® Core™2 Duo Processor (Up to 65 watts)
- Intel® Celeron® D Processor (Up to 86 watts)
- Intel® Celeron® Processor (Up to 65 watts)

##### Intel LGA1156

- Intel® Core™ i5 Processor (Up to 95 watts)
- Intel® Core™ i3 Processor (Up to 73 watts)
- Intel® Core™ i7 Processor (Up to 95 watts)

##### Intel LGA1366

- Intel® Core™ i7 Processor (Up to 130 watts)
- Intel® Core™ i7 Processor Extreme Edition (Up to 130 watts)

#### AMD CPU Clock Speed (Max.)

- Athlon II X3 (Up to 2.9 GHz/95W/AM3)
- Athlon™ II X4 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X4 (Up to 3.4 GHz/140W/AM3, AM2+)
- Phenom™ II X3 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X2 (Up to 3.1 GHz/80W/AM3)
- Phenom™ X4 (Up to 2.6 GHz/140W/ AM2+)
- Phenom™ X3 (Up to 2.5 GHz/95W/ AM2+, 940)
- Athlon™ II X2 (Up to 3 GHz/65W/ AM3)
- Athlon™ X2 (Up to 3.2 GHz/125W/ AM2, AM2+, 939)
- Athlon™ (Up to 2.8 GHz/89W/ AM2, 939, 754)
- Sempron™ (Up to 2.7 GHz/62W/ AM2, AM3, 754)



**i3&i5&i7  
Ready**

Model	Igloo 5710 Plus Silent	Igloo 5710 Plus PWM	
<b>Dimension (mm)</b>	75 (L) × 99 (W) × 139 (H)	75 (L) × 99 (W) × 139 (H)	
<b>Weight (grams)</b>	425	425	
<b>Fan</b>	Bearing Type	Entering Bearing	Entering Bearing
	Rated Voltage	DC 12 V	DC 12 V
	Dimension (mm)	100 × 100 × 25	100 × 100 × 25
	Speed (RPM)	1300 (+260 /-150 rpm)	800 (±300 rpm) ~ 2200(±250 rpm)
	Airflow (CFM)	25	25
	Noise (dBA)	19	19
<b>Interface Material</b>	High Efficiency Thermal Compound	High Efficiency Thermal Compound	

## Igloo 5760 Series

### ► CPU Support

#### Intel CPU Clock Speed (Max.)

##### Intel LGA775

- Intel® Core™2 Quad Processor (Up to 95 watts)
- Intel® Core™2 Extreme Processor (Up to 130 watts)
- Intel® Core™2 Duo Processor (Up to 65 watts)
- Intel® Celeron® D Processor (Up to 86 watts)
- Intel® Celeron® Processor (Up to 65 watts)

##### Intel LGA1156

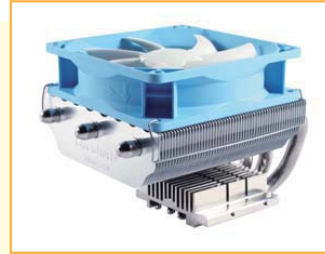
- Intel® Core™ i5 Processor (Up to 95 watts)
- Intel® Core™ i3 Processor (Up to 73 watts)
- Intel® Core™ i7 Processor (Up to 95 watts)

##### Intel LGA1366

- Intel® Core™ i7 Processor (Up to 130 watts)
- Intel® Core™ i7 Processor Extreme Edition (Up to 130 watts)

#### AMD CPU Clock Speed (Max.)

- Athlon II X3 (Up to 2.9 GHz/95W/AM3)
- Athlon™ II X4 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X4 (Up to 3.4 GHz/140W/AM3, AM2+)
- Phenom™ II X3 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X2 (Up to 3.1 GHz/80W/AM3)
- Phenom™ X4 (Up to 2.6 GHz/140W/ AM2+)
- Phenom™ X3 (Up to 2.5 GHz/95W/ AM2+, 940)
- Athlon™ II X2 (Up to 3 GHz/65W/ AM3)
- Athlon™ X2 (Up to 3.2 GHz/125W/ AM2, AM2+, 939)
- Athlon™ (Up to 2.8 GHz/89W/ AM2, 939, 754)
- Sempron™ (Up to 2.7 GHz/62W/ AM2, AM3, 754)



**x3** Three  
Ø8mm  
high performance  
heat pipes

**MIRROR**  
polished  
Copper base

High efficiency axial  
**Bullet fan**  
with PWM function

**i3&i5&i7**  
Ready

## Igloo 5751 Series

### ► Features

- Four ø6 mm high performance heat pipes with nickel coating
- Copper base
- High efficiency bullet axial fan with PWM function
- Multi-platforms (Intel LGA775, 1156, 1366, AMD AM2, AM3)
- Easy to install

### ► CPU Support

#### Intel CPU Clock Speed (Max.)

##### Intel LGA775

- Intel® Core™2 Quad Processor (Up to 95 watts)
- Intel® Core™2 Extreme Processor (Up to 130 watts)
- Intel® Core™2 Duo Processor (Up to 65 watts)
- Intel® Celeron® D Processor (Up to 86 watts)
- Intel® Celeron® Processor (Up to 65 watts)

##### Intel LGA1156

- Intel® Core™ i5 Processor (Up to 95 watts)
- Intel® Core™ i3 Processor (Up to 73 watts)
- Intel® Core™ i7 Processor (Up to 95 watts)

##### Intel LGA1366

- Intel® Core™ i7 Processor (Up to 130 watts)
- Intel® Core™ i7 Processor Extreme Edition (Up to 130 watts)

#### AMD CPU Clock Speed (Max.)

- Athlon II X3 (Up to 2.9 GHz/95W/AM3)
- Athlon™ II X4 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X4 (Up to 3.4 GHz/140W/AM3, AM2+)
- Phenom™ II X3 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X2 (Up to 3.1 GHz/80W/AM3)
- Phenom™ X4 (Up to 2.6 GHz/140W/ AM2+)
- Phenom™ X3 (Up to 2.5 GHz/95W/ AM2+, 940)
- Athlon™ II X2 (Up to 3 GHz/65W/ AM3)
- Athlon™ X2 (Up to 3.2 GHz/125W/ AM2, AM2+, 939)
- Athlon™ (Up to 2.8 GHz/89W/ AM2, 939, 754)
- Sempron™ (Up to 2.7 GHz/62W/ AM2, AM3, 754)



**i3&i5&i7**  
Ready

Model	Igloo 5751	
Dimension (mm)	135 (L) × 100 (W) × 130 (H)	
Weight (grams)	550	
Fan	Bearing Type	Entering Bearing
	Rated Voltage	DC 12 V
	Dimension (mm)	92 × 92 × 25
	Speed (RPM)	Up fan: 1400 rpm; Down fan: PWM 800(+/-300 RPM) at 30% duty~1800(+/-10%) at 100% duty.
	Airflow (CFM)	Up fan: 26.8; Down fan: 34.4 (max.)
	Noise (dBA)	Up fan: 18 dBA; Down fan: 26 dBA (max.)
Interface Material	IceTherm II	

# Multiple Platforms with Extreme Cooling Solutions

## Alaska

### ► Features

- Six ø6 mm high performance heat pipes with nickel coating
- Fins with breathing effect
- Copper base
- High efficiency axial fan with PWM function
- Multi-platforms (Intel LGA775, 1156, 1366, AMD AM2, AM3)
- Easy to install.

### ► CPU Support

#### Intel CPU Clock Speed (Max.)

##### Intel LGA775

- Intel® Core™2 Quad Processor (Up to 95 watts)
- Intel® Core™2 Extreme Processor (Up to 130 watts)
- Intel® Core™2 Duo Processor (Up to 65 watts)
- Intel® Celeron® D Processor (Up to 86 watts)
- Intel® Celeron® Processor (Up to 65 watts)

##### Intel LGA1156

- Intel® Core™ i5 Processor (Up to 95 watts)
- Intel® Core™ i3 Processor (Up to 73 watts)
- Intel® Core™ i7 Processor (Up to 95 watts)

##### Intel LGA1366

- Intel® Core™ i7 Processor (Up to 130 watts)
- Intel® Core™ i7 Processor Extreme Edition (Up to 130 watts)

#### AMD CPU Clock Speed (Max.)

- Athlon II X3 (Up to 2.9 GHz/95W/AM3)
- Athlon™ II X4 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X4 (Up to 3.4 GHz/140W/AM3, AM2+)
- Phenom™ II X3 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X2 (Up to 3.1 GHz/80W/AM3)
- Phenom™ X4 (Up to 2.6 GHz/140W/ AM2+)
- Phenom™ X3 (Up to 2.5 GHz/95W/ AM2+, 940)
- Athlon™ II X2 (Up to 3 GHz/65W/ AM3)
- Athlon™ X2 (Up to 3.2 GHz/125W/ AM2, AM2+, 939)
- Athlon™ (Up to 2.8 GHz/89W/ AM2, 939, 754)
- Sempron™ (Up to 2.7 GHz/62W/ AM2, AM3, 754)



**i3&i5&i7  
Ready**

Model	Alaska	
Dimension (mm)	130(W)x101(L)x156(H)	
Weight (grams)	760	
Fan	Bearing Type	Entering Bearing
	Rated Voltage	DC 12 V
	Dimension (mm)	120 × 120 × 25
	Speed (RPM)	PWM 700 (±300) ~1400 (±250)
	Airflow (CFM)	41.7
	Noise (dBA)	29.6
Interface Material	IceTherm II	

## Siberia

### ► Features

- Six ø6 mm high performance heat pipes with nickel coating
- Copper base
- Fins with high heat exchange ratio
- Multi-platforms (Intel LGA775, 1156, 1366, AMD AM2, AM3)
- Easy to install.

### ► CPU Support

#### Intel CPU Clock Speed (Max.)

##### Intel LGA775

- Intel® Core™2 Quad Processor (Up to 95 watts)
- Intel® Core™2 Extreme Processor (Up to 130 watts)
- Intel® Core™2 Duo Processor (Up to 65 watts)
- Intel® Celeron® D Processor (Up to 86 watts)
- Intel® Celeron® Processor (Up to 65 watts)

##### Intel LGA1156

- Intel® Core™ i5 Processor (Up to 95 watts)
- Intel® Core™ i3 Processor (Up to 73 watts)
- Intel® Core™ i7 Processor (Up to 95 watts)

##### Intel LGA1366

- Intel® Core™ i7 Processor (Up to 130 watts)
- Intel® Core™ i7 Processor Extreme Edition (Up to 130 watts)

#### AMD CPU Clock Speed (Max.)

- Athlon II X3 (Up to 2.9 GHz/95W/AM3)
- Athlon™ II X4 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X4 (Up to 3.4 GHz/140W/AM3, AM2+)
- Phenom™ II X3 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X2 (Up to 3.1 GHz/80W/AM3)
- Phenom™ X4 (Up to 2.6 GHz/140W/ AM2+)
- Phenom™ X3 (Up to 2.5 GHz/95W/ AM2+, 940)
- Athlon™ II X2 (Up to 3 GHz/65W/ AM3)
- Athlon™ X2 (Up to 3.2 GHz/125W/ AM2, AM2+, 939)
- Athlon™ (Up to 2.8 GHz/89W/ AM2, 939, 754)
- Sempron™ (Up to 2.7 GHz/62W/ AM2, AM3, 754)



**i3&i5&i7  
Ready**

Model	Siberia	
Dimension (mm)	146(W)x150(L)x120(H)	
Weight (grams)	620	
Fan	Bearing Type	Entering Bearing
	Rated Voltage	DC 12 V
	Dimension (mm)	Up fan: 140 × 140 × 25; Down fan: 92 × 92 × 25
	Speed (RPM)	Up fan: 1200 ; Down fan: 1000
	Airflow (CFM)	Up fan: 76; Down fan: 24
	Noise (dBA)	Up fan: 26; Down fan: under 17 dBA
Interface Material	IceTherm II	



## F101

### ► Features

- Additional 15% convection area for the system fan
- Copper based
- Vibration proof mechanism
- Light weight
- Multi-platform
- Intel LGA775/1156/1366 ; AMD AM2/AM3 included
- 5 x high performance
- sinter heatpipes
- MOD Designed (Two Fans Option)
- High efficiency: 12 cm axial Bullet fan
- Easy to install
- High quality Thermal compound included

### ► CPU Support

#### Intel CPU Clock Speed (Max.)

##### Intel LGA775

- Intel® Core™2 Quad Processor (Up to 95 watts)
- Intel® Core™2 Extreme Processor (Up to 130 watts)
- Intel® Core™2 Duo Processor (Up to 65 watts)
- Intel® Celeron® D Processor (Up to 86 watts)
- Intel® Celeron® Processor (Up to 65 watts)

##### Intel LGA1156

- Intel® Core™ i5 Processor (Up to 95 watts)
- Intel® Core™ i3 Processor (Up to 73 watts)
- Intel® Core™ i7 Processor (Up to 95 watts)

##### Intel LGA1366

- Intel® Core™ i7 Processor (Up to 130 watts)
- Intel® Core™ i7 Processor Extreme Edition (Up to 130 watts)

#### AMD CPU Clock Speed (Max.)

- Athlon II X3 (Up to 2.9 GHz/95W/AM3)
- Athlon™ II X4 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X4 (Up to 3.4 GHz/140W/AM3, AM2+)
- Phenom™ II X3 (Up to 2.8 GHz/95W/AM3)
- Phenom™ II X2 (Up to 3.1 GHz/80W/AM3)
- Phenom™ X4 (Up to 2.6 GHz/140W/ AM2+)
- Phenom™ X3 (Up to 2.5 GHz/95W/ AM2+, 940)
- Athlon™ II X2 (Up to 3 GHz/65W/ AM3)
- Athlon™ X2 (Up to 3.2 GHz/125W/ AM2, AM2+, 939)
- Athlon™ (Up to 2.8 GHz/89W/ AM2, 939, 754)
- Sempron™ (Up to 2.7 GHz/62W/ AM2, AM3, 754)



**i3&i5&i7  
Ready**

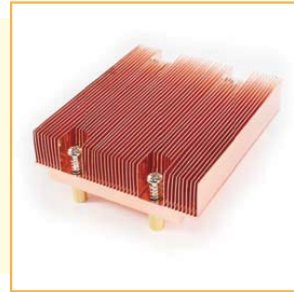


Model	F101 PWM	F101 Silent
Dimension (mm)	143 (L) × 86 (W) × 148 (H)	143 (L) × 86 (W) × 148 (H)
Weight (grams)	750	750
Fan	Bearing Type	Entering Bearing
	Rated Voltage	DC 12 V
	Dimension (mm)	120 × 120 × 25
	Speed (RPM)	700 (± 300) ~ 1,700 (± 250)
	Airflow (CFM)	70 (± 10%)
	Noise (dBA)	32 (Max.)
Interface Material	High Efficiency Thermal Compound	

## Intel Server Coolers

### Polaris 7010 (1U Passive)

Model	Polaris 7010 (1U Passive)
CPU Compatibility	Intel LGA771
Weight (g)	680
Material	Copper
Dimension (mm)	89(L) × 79(W) × 24(H)



### Polaris 7110 (1U Active)

Model	Polaris 7110 (1U Active)
CPU Compatibility	Intel LGA771
Weight (g)	418
Material	Copper
Dimension (mm)	90(L) × 75(W) × 27.5(H)
Fan Speed (rpm)	5000 +/- (10%)
Bearing type	Two ball bearing
Fan Dimension (mm)	75 × 75 × 15
Air Flow Rate (CFM)	9.62
Voltage (V)	DC12V
Noise (Dba)	49



### Polaris 7120 (2U Active)

Model	Polaris 7120 (2U Active)
CPU Compatibility	Intel LGA771
Weight (g)	746
Material	Copper
Dimension (mm)	90(L) × 74.5(W) × 67(H)
Fan Speed (rpm)	PWM 1200 (+/-300 rpm)~4900 (+/-10%)
Bearing type	One ball and one sleeve bearing
Fan Dimension (mm)	60 × 60 × 25
Air Flow Rate (CFM)	24.49 (max.)
Voltage (V)	DC12V
Noise (Dba)	36.5 (max.)



## PC Case Fans

### 3rd Generation Case Fan



8025

Model	GT8025	GT9225	GT12025	
Operation Voltage (VDC)	6.0~13.8	6.0~13.8	7.5~13.8	
Rated Voltage (VDC)	12.0	12.0	12.0	
Rated Current (AMP)	0.12	0.156	0.144	
Input Power (W)	1.44	1.872	1.728	
Bearing System	<b>EDLA1</b> <b>BDLA1</b>	<b>Entering Bearing</b> <b>Two-Ball Bearing</b>	<b>Entering Bearing</b> <b>Two-Ball Bearing</b>	<b>Entering Bearing</b> <b>Two-Ball Bearing</b>
Fan Speed (RPM)	1600±10%	1500±10%	900±200	
Air Volume (CFM)	26.5	36	38	
Airflow (m³ / min)	0.75	1.02	1.05	
Static Pressure (mmH.O)	1.282	1.088	0.655	
Noise Level (dBA)	17	17	16	
Safety	CE, UL, TUV	CE, UL, TUV	CE, UL, TUV	
MTBF (hours / 25 °C)	35,000/50,000	35,000/50,000	35,000/50,000	
Dimension (mm)	80x80x25	92x92x25	120x120x25	
Weight (gram)	66	75	124	

### PWM Fan

Model	GT8025	GT9225	GT12025	
Operation Voltage (VDC)	6.0~13.8	6.0~13.8	6.0~13.8	
Rated Voltage (VDC)	12.0	12.0	12.0	
Rated Current (AMP)	0.14	0.13	0.12	
Input Power (W)	1.68	1.56	1.44	
Bearing System	<b>MWDOA</b> <b>MBDOA</b>	<b>Entering Bearing</b> <b>LWD0A</b> <b>LBD0A</b>	<b>Entering Bearing</b> <b>LWD0A</b> <b>LBD0A</b>	<b>Entering Bearing</b> <b>Two-Ball Bearing</b>
Fan Speed (RPM)	1,000(±300)~2,300(±10%)	800(±300)~1,700(±10%)	700(±300)~1,400(±250)	
Air Volume (CFM)	31.9	38.0	41.7	
Airflow (m³ / min)	0.90	1.08	1.18	
Static Pressure (mmH.O)	2.61	1.42	2.03	
Noise Level (dBA)	29.9(Max)	29.7(Max)	29.6(Max)	
Safety	CE, UL, TUV	CE, UL, TUV	CE, UL, TUV	
MTBF (hours / 25 °C)	35,000/50,000	35,000/50,000	35,000/50,000	
Dimension (mm)	80x80x25	92x92x25	92x92x25	
Weight (gram)	74.2	93.5	144.5	



9225

12025

## NoteBook Cooling

### X-Wing Series



Patent Approved  
(Touch panel)  
www.GlacialTech.com

#### ► Features

- Fan Speed Control (Auto / Six steps)
- Media Key on Touch Panel
- Power S/W on Touch Panel
- High Quality Blower Fan
- Temperature and Fan Speed Display
- Adjustable Height
- 3-ports USB 2.0 Hub

#### ► Color

- Vivid Red
- Sunny Yellow
- Vogue Silver

Model	R1	R2
Material	Metal Mesh and Plastic	
Dimension (W / H / D)	380 x 350 x 50 mm	
Fan Dimension (W / H / D)	70 x 70 x 15 mm (blower fan)	
Fan Speed	1000~1600 (six step)	1600 rpm
Bearing Type	Entering bearing	
Fan Life Expectancy	40,000 hours	
Fan Noise Level (dB-A)	15 ~ 20.5 dBA	20.5 dBA
USB Port	USB2.0 / 1.1 x 3	
Power	USB DC 5V	
Weight	1.2 kg	1.0 kg
Connector	USB2.0 / 1.1 (Max current: 300mA)	
Compatibility (NVIDIA Platform)	Supports all 7"~16" notebook as well as 17"	



Power Your Idea



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.

www.GlacialPower.com

## PC Power

### AX Series 950 Watts



#### ► Electrical Specifications

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

#### ► Safety Approvals



#### ► Output Loding

950 W (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					

### AP Series 500 / 600 / 700 Watts

#### ► Electrical Specifications

- Input Voltage Range: 90 - 264VAC, 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 / 240VAC
- MTBF: 100K hrs min. MIL-HDBK-217F (25°C)
- Dimension: 150 × 140 × 86 mm

#### ► Safety Approvals



#### ► Output Loding

DC Output	500 W (APFC with 12 cm Fan)						600 W (APFC with 12 cm Fan)						700 W (APFC with 12 cm Fan)					
	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb	+5V	+3.3V	+12V1	+12V2	-12V	+5Vsb
Min. Current (A)	1	0.5	1	1	0	0	1	0.5	1	1	0	0	1	0.5	1	1	0	0
Max. Current (A)	18	22	17	17	0.6	3	22	25	25	20	0.6	3	30	30	30	20	0.6	3
Combined Max. Power (W)	130		408		7.2	15	150		504		7.2	15	200		588		7.2	15
Total Max. Output Power (W)	500						600						700					

## AL Series 350 / 450 / 550 / 650 Watts

### ► Electrical Specifications

- Input Voltage Range: 90 - 264VAC, 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 / 240VAC
- MTBF: 100K hrs min. MIL-HDBK-217F (25°C)
- Dimension: PS2 Type 150 × 40 × 86 mm

### ► Safety Approvals



80 PLUS

### ► Output Loding

350 W (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					

450 W (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					

550 W (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					

650 W (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					

## SL Series 400 Watts (China Only)

### ► Electrical Specifications

- Input Voltage Range: 130 - 132VAC / 207 - 264 VAC, 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%
- Leakage Current: <3.5 mA / 240VAC
- Cooling With 12cm Fan: 100,000 hours(25°C)
- MTBF: 100K hrs min. MIL-HDBK-217F (25°C)
- Dimension: PS2 Type 150 × 40 × 86 mm

### ► Safety Approvals



### ► Output Loding

400 W Series (PPFC with 12cm Fan)						
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
Combined Max. Power (W)	385W			16.1		
Total Max. Output Power (W)	400					



## SL Series 350 Watts (China Only)

### ► Electrical Specifications

- Input Voltage Range: 100 - 130VAC / 200 - 264VAC, 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 Approvals



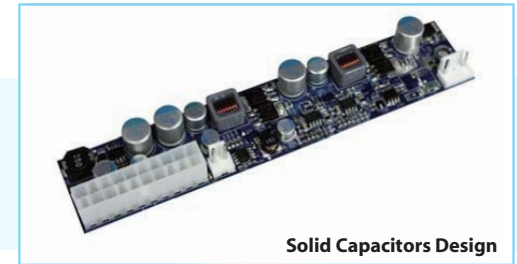
### ► Output Loding

350 W (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					

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

### ► Electrical Specifications

- Input Voltage Range: 11 - 13VDC /10A@12VDC
- 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



Solid Capacitors Design

### ► Output Loding

100 W Series					
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				

150 W Series					
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				

# Combo Type

## AC100P Series

### Single output + USB port Combo AC / DC Input

Retail Package

#### ► 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: 90 - 264 VAC, 47 - 63 Hz, 2A.
- DC Input Voltage Range: 11-15VDC or 11-30VDC.
- 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/240VAC.
- MTBF: 100K hrs min. MIL-HDBK-217F(25°C)
- Dimension: 138.2 × 58.4 × 28.5 mm

#### ► Safety Approvals



#### ► Output Loding

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

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 90-264VAC Non-DC Input fuction								



## AC090N Series

### Single output +USB port

Peak 90W Retail Package

Slim Type : 104.2 x 57.3 x 17.1 mm

#### ► Features

- Slim & Portable
- Compatible with most of the laptops
- 8-level output voltage selectable for your laptop
- 5V/1A USB port to charge 3C devices
- Protections: SCP / OVP / OCP / OTP
- Power efficiency > 88%
- Multiple output plugs to convert various DC plugs
- RoHS compliance and 2 years warranty
- Maximum peak output power 90W

#### ► Electrical Specifications

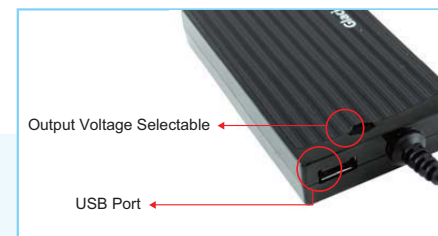
- AC Input Voltage Range / Current /Frequency: 100 ~ 240 VAC/1.5A max./47 ~ 63 Hz
- Power Efficiency: Average > 88%
- Operating Temperature Range: 0 ~ 40°C at full load
- Operating Humidity: 5 ~95%
- Leakage Current: <250mA / 240VAC
- MTBF: 100K hrs min. MIL-HDBK-217F (25°C)
- Dimension: 104.2x57.3x17.1 mm / 0.2 kg

#### ► Safety Approvals



#### ► Output Loding

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 90-264VAC								



## DeskTop Type

### AH065-0S Series Single output 65 Watts

Retail Package

#### ► Electrical Specifications

- Input Voltage Range: 100 - 240VAC, 47 - 63 Hz, 1.7A
- Power Efficiency: Average > 87%
- Operating Temperature Range: 0 ~ 40°C at full load
- Operating Humidity: 10 ~ 90%
- Leakage Current: <60 uA / 240VAC
- MTBF: 100K hrs min.MIL-HDBK-217F (25°C)
- Dimension: 108 × 45.5 × 30.5 mm



#### ► Output Loding

65W(AC Plug Type: C6)					
Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
19V	3.42A	>87%	±5%	200mVpp	65W

#### ► Safety Approvals



### AH090-0S Series Single output 90 Watts

Retail Package



#### ► Electrical Specifications

- Input Voltage Range: 100 - 240VAC, 47 - 63 Hz, 1.7A
- Power Efficiency: Average > 87%
- Operating Temperature Range: 0 ~ 40°C at full load
- Operating Humidity: 10 ~ 90%
- Leakage Current: <75 uA / 240VAC
- MTBF: 100K hrs min.MIL-HDBK-217F (25°C)
- Dimension: 132.5 × 57 × 30.3 mm

#### ► Output Loding

90W(AC Plug Type: C6/C14)					
Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
19V	4.7A	>87%	±5%	200mVpp	90W

#### ► Safety Approvals



### AS60N Series

#### ► Electrical Specifications

- Input Voltage Range: 90 - 264VDC, 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: 3KVAC, I/P ~ FG: 1.5KVAC
- Output Plus type: 2.1 x 5.5 x 9 mm, Inner+
- Leakage Current: <3.5 mA / 240VAC
- MTBF: 100K hrs min.MIL-HDBK-217F (25°C)
- Dimension: 117 × 53 × 30 mm

#### ► Output Loding

60W(AC Plug Type: C14)						
Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
AS60N-12	12V	5A	85%	±5%	200mVpp	60W
AS60N-19	19V	3.16A	85%	±5%	200mVpp	60W
AS60N-24	24V	2.5A	85%	±5%	200mVpp	60W

#### ► Safety Approvals



## WallMount Type

### AS024N 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

#### ► Safety Approval



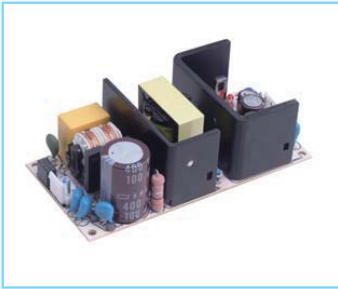
#### ► Output Loading

24W (AC Plug Type: US / UK / EU / AU)							
Part NO.	Model NO.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
AS024N-12	PAW024-12	12V	2A	77%	±5%	120mVpp	24W
AS024N-24	PAW024-24	24V	1A	78%	±3%	240mVpp	24W

# Open Frame Type

## OS45N / 60N Series Single output 45 / 60 Watts

Industrial Field



### ► Electrical Specifications

- Input Voltage Range: 90 - 264VAC, 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: 3KVAC, I/P ~ FG: 1.5KVAC
- Leakage Current: <0.75 mA / 240VAC
- MTBF: 200K hrs min.MIL-HDBK-217F(25°C)
- Dimension: 101 × 50.8 × 30 mm (2 × 4 inch)

### ► Safety Approvals



### ► Output Loading

45W Series							60W Series						
Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts	Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
OS45N-3.3	3.3V	8A	76%	±2%	80mVpp	26.4 W	OS60N-3.3	3.3V	10A	76%	±2%	80mVpp	33 W
OS45N-05	5V	8A	80%	±2%	80mVpp	40 W	OS60N-05	5V	10A	79%	±2%	80mVpp	50 W
OS45N-12	12V	4A	83%	±2%	120mVpp	45 W	OS60N-12	12V	5A	83%	±2%	120mVpp	60 W
OS45N-15	15V	3.2A	84%	±2%	150mVpp	45 W	OS60N-15	15V	4A	84%	±2%	150mVpp	60 W
OS45N-24	24V	2A	85%	±1%	200mVpp	45 W	OS60N-24	24V	2.5A	85%	±1%	240mVpp	60 W
OS45N-48	48V	1A	86%	±1%	300mVpp	45 W	OS60N-48	48V	1.25A	86%	±1%	300mVpp	60 W

## ES320 / 360 Series Enclosure Type Single output 320 / 360 Watts

Industrial Field



### ► Electrical Specifications

- Input Voltage Range: 90 - 264VAC, 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 / 240VAC
- MTBF: 200K hrs min.MIL-HDBK-217F(25°C)
- Dimension: 216 × 115 × 50 mm

### ► Safety Approvals



### ► Output Loading

320W (With Dual Fan design)							360W (With Dual Fan design)						
Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts	Model No.	Output Voltage	Rated Current	Efficiency	Tolerance	Ripple & Noise	Watts
ES320P-3.3	3.3V	55A	76%	±2%	100mVpp	180 W	ES360P-3.3	3.3V	60A	76%	±2%	100mVpp	198 W
ES320P-5	5V	55A	81%	±2%	100mVpp	275 W	ES360P-5	5V	60A	81%	±2%	100mVpp	300 W
ES320P-12	12V	25A	85%	±1%	120mVpp	300 W	ES360P-12	12V	30A	85%	±1%	120mVpp	360 W
ES320P-15	15V	20A	86%	±1%	150mVpp	300 W	ES360P-15	15V	24A	86%	±1%	150mVpp	360 W
ES320P-24	24V	13A	87%	±1%	150mVpp	312 W	ES360P-24	24V	15A	87%	±1%	150mVpp	360 W
ES320P-48	48V	6.7A	88%	±1%	240mVpp	320 W	ES360P-48	48V	7.5A	88%	±1%	240mVpp	360 W

# Battery Charger

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

### ► Features

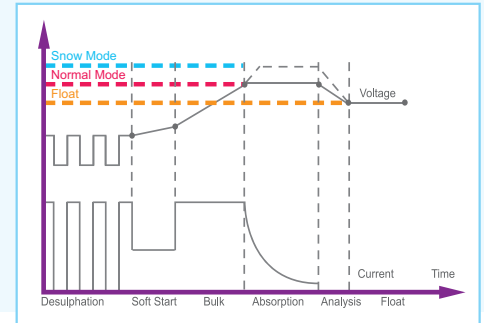
- Design with Switching Mode Circuit
- Compact size and light weight
- High efficiency over 80%
- Three options for charging current
- Plastic cover of insulation with dust
- Built-in Microcontroller and protections against abnormal situations
- 6 charging steps with reviving and extending battery life time functions
- RoHS compliance and 2 years warranty
- Built-in active PFC>0.95 (optional)



### ► Electrical Specifications

- Input Voltage Range: 90 - 130VAC, 3A / 180 - 264VAC, 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 Approvals



### ► Output Loading

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

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

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
4A for Scooter (Fast)	20 ~ 85 Ah (50Ah)	5 ~ 22 hrs (16 hrs)	Max 150 Ah

# LED Driver

## General Types

01 Type



04 Type



02 Type



05 Type



03 Type



06 Type



08 Type



15 Type



### ► Features

- Universal AC input 90 - 264 VAC.
- 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 - 264 VAC, 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: 1.5KVAC
- Leakage Current: <0.75mA/240V AC
- MTBF: 70k hrs min.MIL-HDBK-217F (25°C)

### ► Safety Approvals



### ► 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/PFC	350mA	Stripped	±6%	85 × 54 × 32.5 mm	16W
LC7026-15	3-26V DC/PFC	700mA	Stripped	±6%	85 × 54 × 32.5 mm	18W



## Dimming Type 6 / 9 Watts

### Constant Current Models + Dimming Function

#### ► Features

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

#### ► Safety Approvals

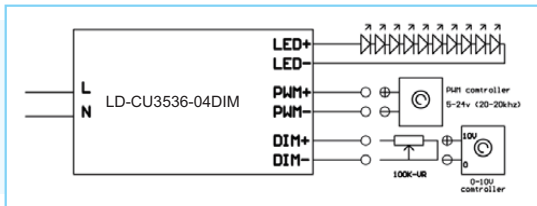


#### ► Output Loading

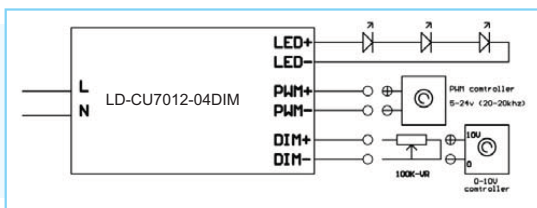
6 Watts Series							
Model No.	Output Voltage	Rated Current	Connector type	Tolerance(A)	Dimension	Dimming Control by	Watts
LC3522-03V	22V	350mA	Scerw	±6%	86 x 45 x 26mm	0~10V Control	6W
LC3522-03W	22V	350mA	Scerw	±6%	86 x 45 x 26mm	PWM Control	6W

9 Watts Series							
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

With the 350mA Output Current  
LC3536-04D driver at 350mA/LED : from 3 to 10 LEDs in series



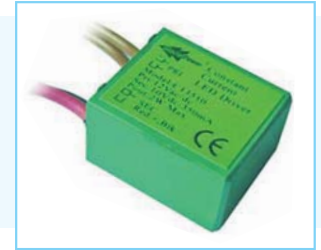
With the 700mA Output Current  
LC7012-04D driver at 700mA/LED : from 1 to 3 LEDs in series



## 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

DC-DC LED Driver							
Model No.	Input 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



#### ► 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(Dimmable)

DC-DC LED Constant Current Regulator							
Model No.	Input 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

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

### ► Features

- Universal AC input 90~264V AC.
- Design with PFC function $\geq$ 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	$\pm$ 10%	108 x 30.5 x 26 mm	12W
LS10P-18	7-18V DC	700mA	81%	Stripped	$\pm$ 10%	108 x 30.5 x 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	$\pm$ 10%	108 x 30.5 x 26 mm	12W
LS10P-17A	4-17V DC	700mA	80%	Stripped	$\pm$ 10%	108 x 30.5 x 26 mm	12W
Safety Approvals <b>CE</b> <b>FC</b> <b>IP67</b> <b>UL</b> <sup>®</sup> E310720							
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	$\pm$ 10%	163 x 45 x 35 mm	33W
LS35P-48	5-48V DC	700mA	87%	Stripped	$\pm$ 10%	163 x 45 x 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	$\pm$ 5%	163 x 45 x 35 mm	29W
Safety Approvals <b>CE</b> <b>FC</b> <b>IP67</b> <b>UL</b> <sup>®</sup> E310720							
Dimming Control: 1.PWM dimming: 0<Vadj<10V(100 ~ 3K Hz) 2.Analog Dimming Control :control by external voltage 0 ~ 10V DC							

**AC Dimming Coming Soon ... ..**

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

### ► Features

- Universal AC input 90~300VAC.
- 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 ~ 300VAC, 47 ~ 63 Hz, 0.2A
- Power Efficiency : Average > 86%
- Operating Temperature Range: -30 ~ 55°C at full load.
- Operating Humidity: 20 ~ 90%
- Withstand Voltage: I/P~O/P: 3K VAC ,I/P~FG:1.5KVAC.
- Leakage Current: I/P~FG:1.5KVAC.
- MTBF: 200~400k hrs min.MIL-HDBK-217F(25°C)

### ► Output Loading

50W - CC,CV MODE DESIGN						
Model No.	Output Voltage	Rated Current	Efficiency	Tolerance(A)	Dimension	Watts
LS050P-12	12V	4.2A	86%	5%	176 x 68 x 39mm	50W
LS050P-24	24V	2A	86%	5%	176 x 68 x 39mm	48W
70W - CC,CV MODE DESIGN						
Model No.	Output Voltage	Rated Current	Efficiency	Tolerance(A)	Dimension	Watts
LS070P-12	12V	6A	86%	5%	176 x 68 x 39mm	72W
LS070P-24	24V	3A	86%	5%	176 x 68 x 39mm	72W
LS070P-36	36V	2A	86%	5%	176 x 68 x 39mm	72W
LS070P-48	48V	1.5A	86%	5%	176 x 68 x 39mm	72W
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-15	15V	6.6A	88%	5%	222*68*39mm	100W
LS100P-24	24V	4.2A	90%	5%	222*68*39mm	100W
LS100P-30	30V	3.3A	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(12V)	15V(12V)	10A	88%	5%	222*68*39mm	150W
LS150P-24	24V	6.3A	90%	5%	222*68*39mm	150W
LS150P-30	30V	5A	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

### ► Safety Approvals

**CE** **FC** **UL**<sup>®</sup> **IP67**  
E310720



Lighting You Always



GlacialLight will co-develop with the existing professional technologies that GlacialTech is known for such as Coolers and Power supplies.

Our goal is to increase the efficiency of our LED lighting products to incorporate all possible aspects and dimensions. At GlacialTech, we do believe that our holistic and intuitive approach to technology gives the best advantage solutions to fulfill our customers when compared with other vendors of LED Lighting products. Lighting you always.

#### Applications

1. Residential lighting: indoor and outdoor, decorative and functional.
2. Commercial building lighting: hotels, restaurants, bars, hospitals, museums, airports, schools, universities, architectural, spot and landscape applications.
3. Retail lighting: cosmetics, jewellery and refrigerated displays.
4. Public lighting: streets, parking lots, garages, train stations, bridges and tunnels.
5. Industrial lighting: factories, storage facilities, warehouses and security applications.



Long Life Span



Energy Saving



Environmental Protection



Cost Saver



Non-UV or IR radiation

[www.GlacialLight.com](http://www.GlacialLight.com)

## Indoor LED

### GL-MR16 Series

#### ► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-MR16-3	3000 K / 6000 K	80 lm - 200 lm (Typ.)	>80 for warm white	15° / 30° (optional)
GL-MR16-5			>75 for cool white	

Electrical			
Typical Power	Input Voltage	Warranty	Lifetime
3 W for GL-MR16-3	12V AC/DC	2 years	Up to 20,000 hrs
5 W for GL-MR16-5			

Mechanical and Dimension		
Outline Dim.	Net. Weight	Socket Base
φ49.3 mm × 49.5 mm	0.047 Kgs	GU5.3

#### ► Safety Approvals



7W Coming Soon ... ..

### GL-BR20 Series

#### ► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-BR20	3000 K / 6000 K	180 lm - 250 lm (Typ.)	>80 for warm white >75 for cool white	150°

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
5 W	>0.9 for 115V AC >0.8 for 230V AC	110V AC or 220V AC	2 years	Up to 20,000 hrs

Mechanical and Dimension			
Outline Dim.	Net. Weight	Socket Base	Cover
ø60 mm × 98 mm	0.10 Kgs	E26 / E27 / GU10 / B22	Clear / Frosted

#### ► Safety Approvals



Dimmable

## GL-BR30 Series

### ► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-BR30-6	3000 K / 6000 K	400 lm - 600 lm (Typ.)	>80 for warm white	120° / 60° / 30° (optional)
GL-BR30-9			>75 for cool white	

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
7.2 W for GL-BR30-6	>0.9 for 115V AC >0.8 for 230V AC	100 - 240V AC	3 years	Up to 35,000 hrs
10.4 W for GL-BR30-9				

Mechanical and Dimension			
Outline Dim.	Net. Weight	Socket Base	Cover
ø98 mm × 125 mm	0.25 Kgs	E26 / E27	Clear / Frosted



**Dimmable**  
(Optional)

### ► Safety Approvals



## GL-BR40 Series

### ► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-BR40-9	3000 K / 6000 K	400 lm - 1000 lm (Typ.)	>80 for warm white	120° / 60° / 30° (optional)
GL-BR40-15			>75 for cool white	

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
10.4 W for GL-BR40-9	>0.9 for 115V AC >0.8 for 230V AC	100 - 240V AC	3 years	Up to 35,000 hrs
17.2 W for GL-BR40-15				

Mechanical and Dimension			
Outline Dim.	Net. Weight	Socket Base	Cover
ø127 mm × 158 mm	0.45 Kgs	E26 / E27	Clear / Frosted



**Dimmable**  
(Optional)

### ► Safety Approvals



## GL-GB08 Series Grow Light (Hydroponic)

### ► Specifications

Optical				
Model No.	Wave length(nm)	Luminous (lm)	PPDF	Beam Angle
GB08-6R3B	Red: 650~670	Red: 80 ~112	35.44	60°
GB08-8R1B	Blue: 450~470	Blue: 08 ~12		

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
10 W	>0.9 for 115V AC >0.8 for 230V AC	110 ~ 240V AC	1 years	Up to 20,000 hrs

Mechanical and Dimension			
Outline Dim.	Net. Weight	Socket Base	Cover
ø60 mm × 98 mm	0.10 Kgs	E26 / E27	Clear



### ► Safety Approvals



## GL-GB16 Series Grow Light

### ► Specifications

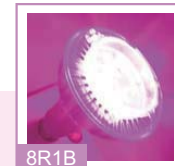
Optical				
Model No.	Wave length(nm)	Luminous (lm)	PPDF	Beam Angle
GB16-6R3B	Red: 650~670	Red: 80 ~112	45.96	60°
GB16-8R1B	Blue: 450~470	Blue: 08 ~12		

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
20 W	>0.9 for 115V AC >0.8 for 230V AC	110 ~ 240V AC	1 years	Up to 20,000 hrs

Mechanical and Dimension			
Outline Dim.	Net. Weight	Socket Base	Cover
ø127 mm × 158 mm	0.25 Kgs	E26 / E27	Clear / Frosted



### ► Safety Approvals



## GL-T8 Tube Series - High Power

► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-T8-8 GL-T8-12	3000 K / 6000 K	360 lm - 1000 lm (Typ.)	>80 for warm white >75 for cool white	120°

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
10 W for GL-T8-8 14.5 W for GL-T8-12	>0.9 for 115V AC >0.8 for 230V AC	100 - 240V AC	2 years	Up to 35,000 hrs

Mechanical and Dimension			
Outline Dim.	Net. Weight	Socket Base	Cover
2-ft (Type1): ø29.5 mm × 580 mm 2-ft (Type2): ø29.5 mm × 589 mm	2-ft: 0.41 Kgs	G13	Clear / Frosted

► Safety Approvals



## GL-T8 Tube Series - Low Power (Available: 1 / 2 / 4 / 5 feet)

► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-L210 GL-L420	3000 K / 6000 K	500 lm - 1200 lm (Typ.)	>80 for warm white >75 for cool white	120°

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
GL-L210 -10W GL-L420 -20W	>0.9	100-110V 120V 220-240V 270V	2 years	Up to 35,000 hrs

Mechanical and Dimension			
Outline Dim.	Net. Weight	Socket Base	Cover
2-ft (Type1): ø29.5 mm × 580 mm 2-ft (Type2): ø29.5 mm × 589 mm 4-ft : ø28.5 mm × 1200 mm	2-ft: 0.15 Kgs 4-ft: 0.3 Kgs	G13	Clear / Frosted

► Safety Approvals



## GL-Light Bar Series

► Specifications (with dimming function)

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
LS-15 cm LS-30 cm LS-60 cm LS-90 cm LS-120 cm	3000 K / 6000 K	68 lm - 125 lm (Typ.) 135 lm - 250 lm (Typ.) 270 lm - 500 lm (Typ.) 405 lm - 750 lm (Typ.) 540 lm - 1000 lm (Typ.)	>80 for warm white >75 for cool white	110°

Electrical			
Typical Power	Input Voltage	Warranty	Lifetime
1.65 W / 3.3 W / 6.6 W / 9.9 W / 13.2 W	DC 24V	2 years	Up to 20,000 hrs

Mechanical and Dimension	
Outline Dim.	Net. Weight
15 cm / 30 cm / 60 cm / 90 cm / 120 cm	90 g / ft

REMARK : 12V DC input optional

► Safety Approvals



**AR111 Coming Soon ... ..**

## Outdoor LED

## GL-SP07 Series

## ► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-SP07	3000 K / 6000 K	300 lm - 450 lm (Typ.)	>80 for warm white >75 for cool white	30° / 60° (optional)

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
10 W	>0.9 for 115V AC >0.8 for 230V AC	100 - 240V AC	2 years	Up to 20,000 hrs

Mechanical and Dimension	
Outline Dim.	Net. Weight
ø140 mm × 140 mm × 85 mm	0.68 Kgs

## ► Safety Approvals

CE FC IP64



DC 12V input(Optional)

## GL-SP15 Series

## ► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-SP15	3000 K / 6000 K	650 lm - 1000 lm (Typ.)	>80 for warm white >75 for cool white	30° / 60° (optional)

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
20 W	>0.9 for 115V AC >0.8 for 230V AC	100 - 240V AC	2 years	Up to 20,000 hrs

Mechanical and Dimension	
Outline Dim.	Net. Weight
ø185 mm × 175 mm × 130 mm	1.2 Kgs

## ► Safety Approvals

CE FC IP65



DC 12-24V input(Optional)

## GL-SP15 with Sensor and CCD Series

## ► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-SP15S GL-SP15C	3000 K / 6000 K	650 lm - 1000 lm (Typ.)	>80 for warm white >75 for cool white	60°

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
21 W	>0.9 for 115V AC >0.8 for 230V AC	100 ~ 240V AC	2 years	Up to 20,000 hrs

Mechanical and Dimension			
Outline Dim.	Net. Weight	Sensor	CCD (optional)
ø190 mm × 185 mm × 155 mm	1.3 Kgs	Automatic infrared heat detector	1/3" color CCD

REMARK : CCD funtion with patent approved

## ► Safety Approvals

CE FC IP54



CCD Type



Sensor Type

## GL-SP30 Series

## ► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-SP30	3000 K / 6000 K	1200 lm - 1900 lm (Typ.)	>80 for warm white >75 for cool white	30° / 60° (optional)

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
38 W	>0.9 for 115V AC >0.8 for 230V AC	100 - 240V AC	2 years	Up to 20,000 hrs

Mechanical and Dimension	
Outline Dim.	Net. Weight
ø313 mm × 223 mm × 92 mm	3.5 Kgs

## ► Safety Approvals

CE FC IP66



DC 12-24V input(Optional)

## GL-SP60 Series

### ► Specifications

Optical				
Model No.	CCT (Typical)	Luminous (lm)	CRI (Ra)	Beam Angle
GL-SP60	3000 K / 6000 K	2450 lm - 3800 lm (Typ.)	>80 for warm white >75 for cool white	30° / 60° (optional)

Electrical				
Typical Power	Power Factor	Input Voltage	Warranty	Lifetime
76 W	>0.9 for 115V AC >0.8 for 230V AC	100 - 240V AC	2 years	Up to 20,000 hrs

Mechanical and Dimension	
Outline Dim.	Net. Weight
ø450 mm × 305 mm × 135 mm	7.6 Kgs

REMARK : Streetlight solutions are optional

### ► Safety Approvals

CE FC IP65



**High Bay Lamp Coming Soon ... ..**

**Down Light Lamp Coming Soon ... ..**

## Dynamo2 LED Torch **LT103**



### ► Features

- Color : Pearl White
- High-quality lithium-ion battery
- Great for power outages, emergencies, camping and more
- Changeable battery

### ► Specifications

- Rechargeable Lithium-ion battery/LIR2456, 3V
- Under normal wear and tear, the Lithium-ion battery is allowed to recharge ≥500 times.
- After 2 minutes of charging, the device will operate for 2~8 minutes.
- Portable USB charger hand winding to Mobile Phone which's power duration mainly depends on what model of mobile phone you are charging to.
- Mini USB power within USB cable

### ► Notice

- Keep power switch at "OFF" position when not in use.
- Charge the flashlight when light turns dim.
- Do not shine directly into people or animals eyes.
- Ensure at least a 1 minute charge after every operation.
- Ensure at least a 1 minute charge after 2 months of long-term storage.

## PalmSiren Dyamo 3 **LT263**

### ► Specifications

- Rechargeable Lithium-ion battery/LIR2465, 3V
- Under normal wear and tear, the Lithium-ion battery is allowed to recharge ≥500 times.
- After 2 minutes of charging, the device will operate for 2~8 minutes.
- Portable USB charger hand winding to Mobile Phone which's power duration mainly depends on what model of mobile phone you are charging to.

### ► Operation for Mobile Phone charge

#### a. To charge Mobile Phone:

Connect the USB connector to the laptop; the mini connector connects with torch.

#### b. Cautions:

- Before charging, please use a USB wire to connect the torch's USB port and your mobile phone.
- Please roll the crank to generate the electricity required for charging your mobile phone.
- Switch the mobile phone Off before charge.
- Avoid any collision or falling on ground while charging.

### ► Instruction for Flashlight Operation

- Press once to light 3 LEDs.
- Press twice to light 3 LEDs in blinking mode.
- Press again to switch off the power.
- Repeat the above steps for the function you wish to operate.

### ► Notice

- Make sure your mobile phone can charge from the Torch USB port.
- Switch the mobile phone off before charging.
- Keep power switch at "OFF" position when not in use.
- Charge the flashlight when light turns dim.
- Do not shine directly into people or animals eyes.
- Ensure at least a 1 minute charge after every operation.
- Ensure at least a 1 minute charge after 2 months of long-term storage.





www.GlacialStars.com



## PC Case Fan

### IceLight LED Fan Series 8025 / 12025

#### ► Electrical Specifications

Model	IceLight 8025 (blue color / four color light)	IceLight 12025 (blue color / four color light)
Operation Voltage (V DC)	6.0~13.8	6.0~13.8
Rated Voltage (V DC)	12	12
Rated Current (AMP)	0.15	0.13
Input Power (W)	1.8	1.56
Bearing System	Sleeve	Sleeve
Fan Speed (RPM)	1700 (±10%)	1000(±250%)
Air Volume (CFM)	24.5	45.8
Airflow (m3/min)	0.69	1.29
Static Pressure (mmH2O)	1.04	0.85
Noise Level (dBA)	19	20
Safety	CE, UL	CE, UL
MTBF (hours / 25°C)	30000	30000
Dimension (mm)	80×80×25	120×120×25
Weight	90	150



#### ► Safety Approvals



## Notebook PC Cooling Pad

### IcePad Series 1300 / 1600



#### ► Features

- Ergonomics design
- Easy to use
- Dual 7 cm silent fans

#### ► Electrical Specifications

Model	IcePad 1300 (silver / black)	IcePad 1600 (silver / black)
Cooler Dimension (mm)	300 × 130 × 38	350 × 130 × 38
Fan Speed (RPM)	1600 (per fan)	1600 (per fan)
Fan Dimension (mm)	70 × 70 × 10	70 × 70 × 10
Rated Voltage (V DC)	5	5



Notebook Cooling Pad





## Thermal Grease

### IceTherm I / II

► Features

- High Thermal Conductivity
- Non-Electrical Conductive
- Non-Corrosive
- No Bleeding
- No Curing
- Easy to Print



► Electrical Specifications

IceTherm I	
Thermal Conductivity (W/m-k)	4.5
Operation Temperature (°C)	-30~180°C
Color	Light Gray
Net weight (gram)	1.5

IceTherm II	
Thermal Conductivity (W/m-k)	8.1
Operation Temperature (°C)	-40~100°C
Color	Gray
Net weight (gram)	1.5

## HDD Cooler

### IceCore1 Series 3.5"

► Electrical Specifications

IceCore1 Series 3.5"	
Cooler Dimension (mm)	130 × 101 × 18
Cooler Weight (gram)	300
Fan Bearing Type	Sleeve Bearing
Fan Speed	1800 RPM per fan
Fan Rated Voltage	DC 12V
Fan Dimension (mm)	60 × 60 × 15



3.5" Hard Disc Thermal Solution

► Safety Approvals

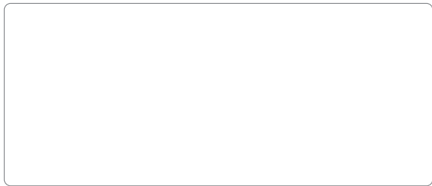


## Case FAN

### IceWind Series 4/6/7/8/9/12/14cm

	IceWind 4010	IceWind 6015	IceWind 7025	IceWind 8025	IceWind 9225	IceWind 12025	IceWind 14025
Operation Voltage (VDC)	6.0~13.8	6.0~13.8	6.0~13.8	6.0~13.8	6.0~13.8	6.0~13.8	6.0~13.8
Rated Voltage (VDC)	12	12	12	12	12	12	12
Rated Current (AMP)	0.14	0.22	0.17	0.13	0.12	0.17	0.18
Input Power (W)	1.44	2.4	1.8	1.32	1.32	1.92	1.92
Bearing System	Sleeve Bearing	Sleeve Bearing	Sleeve Bearing	Sleeve Bearing	Sleeve Bearing	Sleeve Bearing	Sleeve Bearing
Fan Speed (RPM)	6500(+/-10%)	3500(+/-10%)	2800(+/-10%)	1700(+/-10%)	1500(+/-10%)	1000(+/-250RPM)	1000(+/-250RPM)
Airflow (CFM)	5.03	17.89	25.15	24.5	33.7	45.8	51.27
Airflow (m³3/min)	0.14	0.51	0.716	0.69	0.95	1.29	1.45
Static Pressure (mmH2O)	3.01	2.31	0.274	1.04	1.35	0.85	0.9
Noise Level (dBA)	32	29	31	19	20	20	25.6
MTBF (hours/25°C)	25000	25000	30000	30000	30000	30000	30000
Safety	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL
Dimension (mm)	40×40×10	60×60×15	70×70×25	80×80×25	92×92×25	120×120×25	140×140×25
Total Weight(grams)	13.7	36.5	57.3	66	84.1	103.6	156





- FAN APPROVED BY CE & TUV & UL
- The specifications are subject to change without notice. All brand names and trademarks are the properties of their respective owners.

For further information, please consult our website: [www.GlacialTech.com](http://www.GlacialTech.com)

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