





## What is Switch Mode Power Supply

Switch mode power supply, also known as switching power, is a type of power supply using power electronics technology to control the time ratio of opening and closing.



## **Features**

- 30mm ultra-thin enclosure design
- Easy to install and light weight

- Full range of AC input voltage (90□264VAC); high efficiency and small output ripple
- Low power loss design; less heat consumption; no load power consumption is only 0.2-1.0W

- High frequency PWM control technology & fast response
- High power MOSFET driving; stable and reliable operation; strong overload ability
- 100% full load aging test can be passed for all products

Complete protection functions: overvoltage protection, overload protection, over-temperature protection, short circuit protection, etc.

# What is Switch Mode Power Supply?



### **Application**

Our product can be widely used in the following fields:

- Industrial control system
- Industrial automation machinery
- Mechanical and electrical equipment
- Electronic instruments
- Household appliances

In those fields, our product is used as the power supply for LED screen, electronic testing equipment, control equipment, radio and television, computer network, medical apparatus and instruments, intelligent monitoring, and many more.

#### **Technical Parameters**

Item		Technical Parameter							
Rated power		35W	50W	75W	100W	150W	200W	350W	
AC Input voltage		100~264 V (actual input voltage range: 90~264 V ) 85~132 V / 176~264 V (can be switched)							
AC Input frequency		47~63 Hz							
Output stability		≤1%							
Load regulation rate		≤1% (standard)							
Micro regulation range of output voltage		±10% (rated output voltage)							
Ripple and noise		≤1% peak value (100mVp-p standard)							
Overvoltage protection		110%~140% (protection mode: output is tripped, and it will be recovered automatically when the abnormal condition is eliminated)							
Overload protection		110%~150% (protection mode: hiccup mode is activated, and it will be recovered automatically when the abnormal condition is eliminated)							
Over-temperature protection		-					100±5°C		
Output loop		Single							
Cooling method		Natural wind cooling ( < 200W)							
Working environment		Working temperature: -10°C +60°C Humidity: 20%~90%RH							
Outline dimension	mm	99×82×30		99×97×30	<97×30 129×97×30 159×		215×115×30		
Installation dimension		Figu	ure 1	Figure 2	Figure 3	Figure 4	Figure 5	Figure 6	
Weight	kg	0.23	0.23	0.25	0.34	0.48	0.66	0.76	
Safety & EMC	Safety standard	UL60950-1, TUV EN60950-1, EN60335-1, EN61558-1/-2-16							
	Withstand voltage	Input versus output: 4kVAC Input versus grounding: 2kVAV Output versus grounding: 1.25kAC/1min							
	Insulation resistance	Input versus output,input versus grounding, output versus grounding/500VDC/25°C /70%RH							
	EMC emission	EN55032(CISPR32) Class B, EN55014, EN61000-3-2							
	EMC immunity	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61000-6-2 (EN50082-2)							

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## **Construction of references Principle**

Product Name	Rated Power	Output Voltage
HDKUS	50	12
<b>\</b>	<b>\</b>	<b>→</b>
0230: 230V	35: 35W	05: 5V
	50: 50W	12: 12V
	<b></b>	
	350: 350W	48: 48V

#### **Order Information for HDKUS**

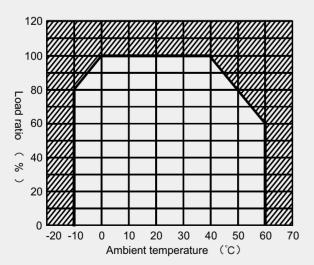
Model	Power	Input	DC Output (A)					Function	
	W	Remark 1	5V	12V	15V	24V	36V	48V	Remark 2
HDKUS-35	35	F	7	3	2.4	1.5	1	0.8	ABK
HDKUS-50	50	F	10	4.2	3.4	2.2	1.45	1.1	ABK
HDKUS-75	75	F	14	6	5	3.2	2.1	1.6	ABK
HDKUS-100	100	F	18	8.5	7	4.5	2.8	2.3	ABK
HDKUS-150	150	F/S	22	12.5	10	6.5	4.3	3.3	ABK
HDKUS-200	200	S	40	17	14	8.8	5.9	4.4	ABCK
HDKUS-350	350	S	60	29	23.2	14.6	9.7	7.3	ABCDK

Remark 1: selection method for 85-132/170-264VAC: F: full range; S: switching selection

Remark 2: function A: overload (overcurrent) short circuit protection; B: output overvoltage protection;

C: over-temperature protection; D: automatic switch control of cooling fan (prolong service life); K: output LED display

#### **Derating Curve**



Note: working temperature is very important as the load is varying linerly when the temperature is below 0°C or more than 40°C.

- The load ratio is reduced by 2% per degree when the working temperature is decreased from 0°C to -10°C;
- $\cdot$  The load ratio is reduced by 2% per degree when the working temperature is increased from 40  $^{\circ}$ C to 60  $^{\circ}$ C .

# Increased resistance to external disturbances helps achieve stable equipment operation.

# **Application**

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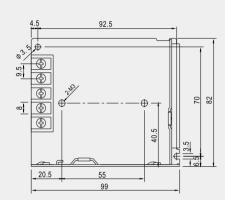
We Provide AC / DC Power Solutions for a variety of Industrial Applications



# Switch Mode Power Supply

## **Model and Overall Dimensions**

Figure 1: 35W/50W



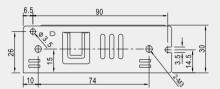
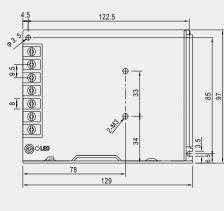


Figure 3: 100W



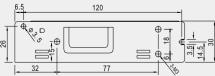
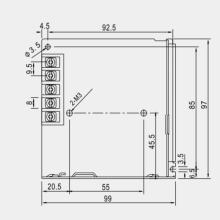


Figure 2: 75W



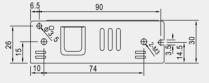
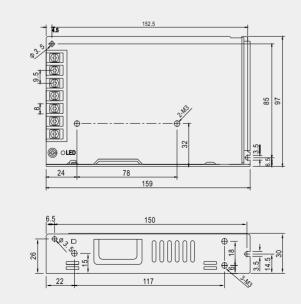


Figure 4: 150W



# Switch Mode Power Supply

## **Model and Overall Dimensions**

Figure 5: 200W

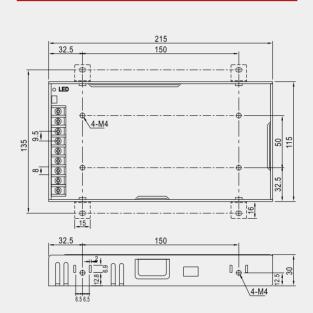
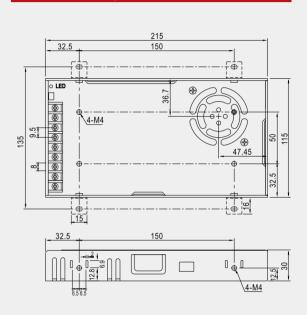


Figure 6: 350W









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