

NLD SERIES

Din-Rail Power Supply



Product highlights

- Universal AC input; Single-phase
- Industrial grade design
- High efficiency
- Natural cooling convection
- Complete all-round protection
- High reliability with MTBF up to 500000H.



Industrial Automation



Process Control



Traffic & Transport



Solar Power



Electric Control

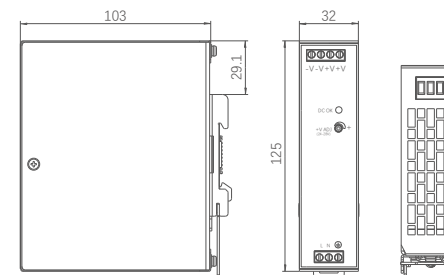


Building control

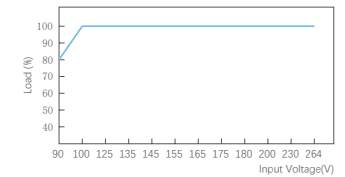
Technical specification (75W Din-Rail Power Supply)

	Technical specification	NLD-75-24
Output data	DC rated voltage	24V
	Output voltage range	24~28V
	Rated output current	3.2A
	Load regulation	±1.0%
	Ripple & Noise	120mV@25°C
	Temperature coefficient	±0.03%/°C
	Overshoot voltage	≤5%
	Voltage overshoot range	24V±5%
	Output rise time	< 100ms
	Power-on delay	≤ 3.0s @115Vac; ≤ 1.5s @230Vac
Hold-up time	≥ 20ms@230Vac; ≥ 10ms@115Vac	
Capacitive load	500μ F/A	
Input data	AC voltage range	90~264Vac
	DC voltage	127~370Vdc
	Rated voltage	115Vac; 230Vac
	Frequency range	47~63Hz
	PFC	/
	Inrush current	20A@115Vac; 35A@230Vac, 25°C, Cold start
Protection	Standby power loss	< 1W @24Vdc
	Efficiency	≥ 88% @230Vac full load
	Maximum over-voltage	30~35Vdc
	Over-current	105~130%
Operating environment	Input under-voltage protection	Hiccup mode
	Operating temperature	-20°C~70°C (> 50°C starts to derating)
	Storage temperature	-40°C to +85°C
	Humidity	5%~95% (non-condensing)
Others	Vibration standard	Acc.to IEC60068-2-6, 10 ~ 500Hz, 2G 10 min /1 cycle, 60 min/each axis direction (X, Y, Z)
	Weight, approx.	< 0.5kg
Safety&EMC	MTBF	500,000 H
	RE/CE	Standard: EN55032/GB9254 Class B
	Harmonic Current	Standard: IEC61000-3-2/GB17625.1 Class A

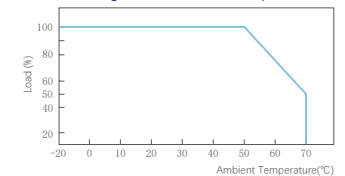
75W Product size: 32 x 125 x 103mm



Derating Curve of Input Voltage



Derating Curve of Ambient Temperature



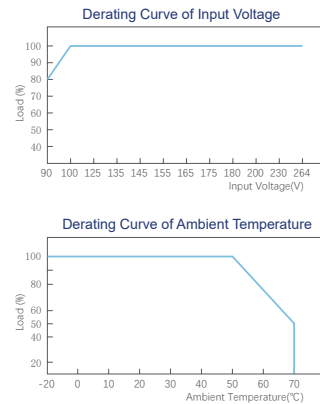
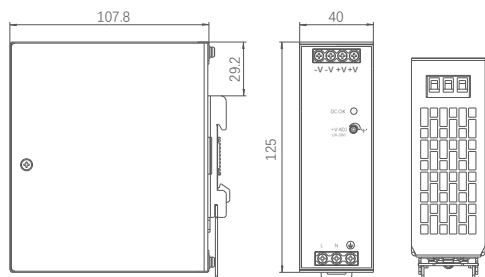
Technical specification (120W Din-Rail Power Supply)

	Technical specification	NLD-120-24
Output data	DC rated voltage	24V
	Output voltage range	24~28V
	Rated output current	5A
	Load regulation	±1.0%
	Ripple & Noise	120mV@25°C
	Temperature coefficient	±0.03 %/°C
	Overshoot voltage	≤5%
	Voltage overshoot range	24V±5%
	Output rise time	< 100ms
	Power-on delay	≤3.0s @115Vac; ≤1.5s @230Vac
	Hold-up time	≥16ms@230Vac; ≥10ms@115Vac
Input data	Capacitive load	500μ F/A
	AC voltage range	90~264Vac
	DC voltage	127~370Vdc
	Rated voltage	115Vac; 230Vac
	Frequency range	47~63Hz
	PFC	/
	Inrush current	20A@115Vac; 35A@230Vac, 25°C, Cold start
Protection	Standby power loss	< 1W @24Vdc
	Efficiency	≥89.5% @230Vac full load
	Maximum over-voltage	30~35Vdc
	Over-current	105~130%
Operating environment	Input under-voltage protection	Hiccup mode
	Operating temperature	-20°C~70°C(> 50°C starts to derating)
	Storage temperature	-40°C to +85°C
	Humidity	5%~95% (non-condensing)
Others	Vibration standard	Acc.to IEC60068-2-6, 10 ~ 500Hz,2G 10 min /1 cycle, 60 min/each axis direction (X、Y、Z)
	Weight, approx.	< 0.55kg
Safety&EMC	MTBF	500,000 H
	RE/CE	Standard: EN55032/GB9254 Class B
	Harmonic Current	Standard: IEC61000-3-2/GB17625.1 Class A

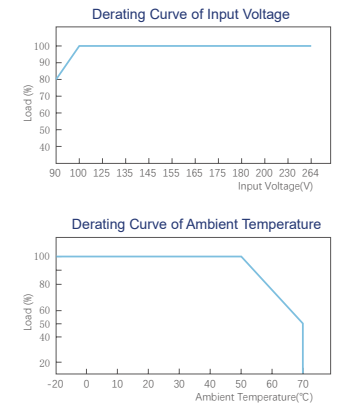
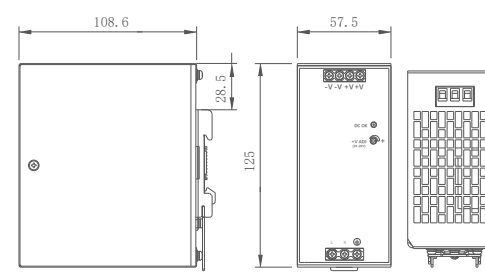
Technical specification (240W Din-Rail Power Supply)

	Technical specification	NLD-240-24
Output data	DC rated voltage	24V
	Output voltage range	24~28V
	Rated output current	10A
	Load regulation	±1.0%
	Ripple & Noise	150mV@25°C
	Temperature coefficient	±0.03 %/°C
	Overshoot voltage	≤5%
	Voltage overshoot range	24V±5%
	Output rise time	< 100ms
	Power-on delay	≤3.0s @115Vac; ≤1.5s @230Vac
	Hold-up time	≥20ms@230Vac; ≥20ms@115Vac
Input data	Capacitive load	500μ F/A
	AC voltage range	90~264Vac
	DC voltage	127~370Vdc
	Rated voltage	115Vac; 230Vac
	Frequency range	47~63Hz
	PFC	≥0.95/230Vac; ≥0.98/115Vac
	Inrush current	20A@115Vac; 35A@230Vac, 25°C, Cold start
Protection	Standby power loss	< 5W @24Vdc
	Efficiency	≥91% @230Vac full load
	Maximum over-voltage	30~35Vdc
	Over-current	105~130%
Operating environment	Input under-voltage protection	< 80Vac/113Vdc
	Operating temperature	-20°C~70°C(> 50°C starts to derating)
	Storage temperature	-40°C to +85°C
	Humidity	5%~95% (non-condensing)
Others	Vibration standard	Acc.to IEC60068-2-6, 10 ~ 500Hz,2G 10 min /1 cycle, 60 min/each axis direction (X、Y、Z)
	Weight, approx.	< 0.8kg
Safety&EMC	MTBF	500,000 H
	RE/CE	Standard: EN55032/GB9254 Class B
	Harmonic Current	Standard: IEC61000-3-2/GB17625.1 Class A

120W Product size: 40 x 125 x 107.8mm



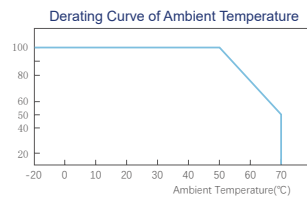
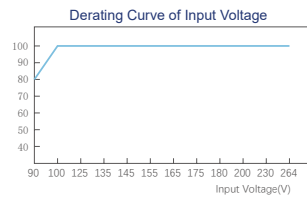
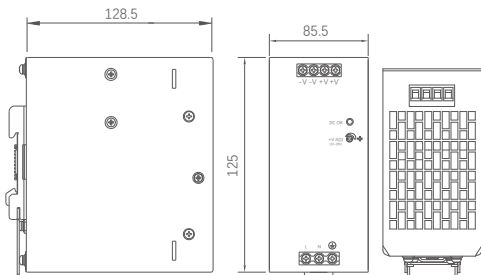
240W Product size: 57.5 x 125 x 108.6mm



Technical specification (480W Din-Rail Power Supply)

	Technical specification	NLD-480-24
Output data	DC rated voltage	24V
	Output voltage range	24~28V
	Rated output current	20A
	Load regulation	±1.0%
	Ripple & Noise	150mV@25°C
	Temperature coefficient	±0.03 %/°C
	Overshoot voltage	≤5%
	Voltage overshoot range	24V±5%
	Output rise time	< 100ms
	Power-on delay	≤ 3.0s @115Vac; ≤ 1.5s @230Vac
	Hold-up time	≥ 16ms@230Vac; ≥ 16ms@115Vac
Input data	Capacitive load	500μ F/A
	AC voltage range	90~264Vac
	DC voltage	127~370Vdc
	Rated voltage	115Vac; 230Vac
	Frequency range	47~63Hz
	PF	≥ 0.95/230Vac; ≥ 0.98/115Vac
	Inrush current	20A@115Vac; 35A@230Vac, 25°C, Cold start
	Standby power loss	< 5W @24Vdc
Protection	Efficiency	≥ 92.5% @230Vac full load
	Maximum over-voltage	30~35Vdc
	Over-current	105~130%
Operating environment	Input under-voltage protection	< 85Vac/120Vdc
	Operating temperature	-20°C~70°C (> 50°C starts to derating)
	Storage temperature	-40°C to +85°C
	Humidity	5%~95% (non-condensing)
Others	Vibration standard	Acc.to IEC60068-2-6, 10 ~ 500Hz, 2G 10 min /1 cycle, 60 min/each axis direction (X, Y, Z)
	Weight, approx.	< 1.5kg
Safety&EMC	MTBF	500,000 H
	RE/CE	Standard: EN55032/GB9254 Class B
	Harmonic Current	Standard: IEC61000-3-2/GB17625.1 Class A

480W Product size: 85.5x 125 x 128.5mm



SLD SERIES

Din-Rail Power Supply



Product highlights

- Universal AC input; Single-phase
- Industrial grade design
- Last for 3 seconds when the input peak current reaches 1.5 times rated
- High efficiency
- Natural cooling convection
- Complete all-round protection
- High reliability with MTBF up to 500000H.



Industrial Automation



Process Control



Traffic & Transport



Solar Power



Electric Control

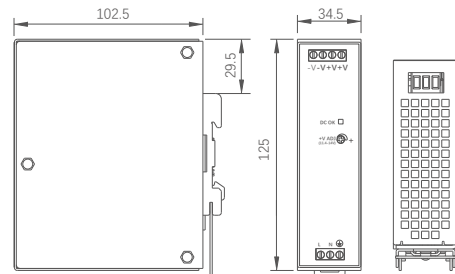


Building control

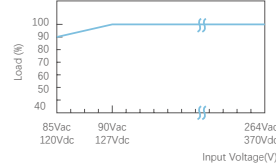
Technical specification (72W Din-Rail Power Supply)

	Technical specification	SLD-72-12	SLD-72-24	
Output data	DC rated voltage	12V	24V	
	Output voltage range	11.4-14V	22.8-28V	
	Rated output current	6A	3A	
	Load regulation	±1.5%	±1.0%	
	Ripple & Noise	80mV@25°C	100mV@25°C	
	Temperature coefficient	±0.2%/°C		
	Overshoot voltage	≤5%		
	Voltage overshoot range	12V±5%	24V±5%	
	Output rise time	< 60ms		
	Power-on delay	≤3.0S@230Vac		
Input data	Hold-up time	≥20ms@230Vac; ≥10ms@115Vac		
	Capacitive load	500μ F/A		
	AC voltage range	90~264Vac		
	DC voltage	127~370Vdc		
	Rated voltage	115Vac; 230Vac		
	Frequency range	47~63Hz		
	PFC	/		
	Inrush current	35A@115Vac; 60A@230Vac, 25°C, Cold start		
	Standby power loss	< 1W/230Vac@12V/0A	< 1W/230Vac@24V/0A	
	Efficiency	≥87%/230Vac@12V/6A	≥87.5%/230Vac@24V/3A	
Protection	Maximum over-voltage	≤17V	≤34V	
	Over-current	110%~150%		
	Input under-voltage protection	< 80Vac/112Vdc		
Operating environment	Operating temperature	-20°C~70°C (> 55°C starts to derating)		
	Storage temperature	-40°C to +85°C		
	Humidity	5%~95% (non-condensing)		
	Vibration standard	Acc.to IEC60068-2-6, 10 ~ 500Hz, 2G 10 min /1 cycle, 60 min/each axis direction (X, Y, Z)		
Others	Weight, approx.	< 0.75kg		
	MTBF	500,000 H		
Safety&EMC	RE/CE	Standard: EN55032/GB9254 Class B		
	Harmonic Current	Standard: IEC61000-3-2/GB17625.1 Class A		

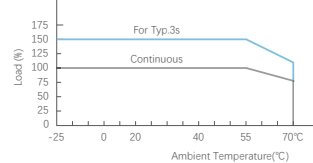
72W Product size: 34.5 x 125 x 102.5mm



Derating Curve of Input Voltage



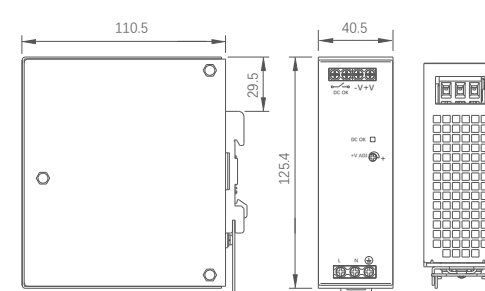
Derating Curve of Ambient Temperature



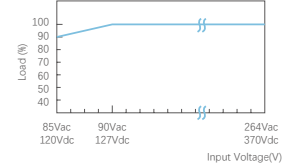
Technical specification (120W Din-Rail Power Supply)

	Technical specification	SLD-120-12	SLD-120-24	
Output data	DC rated voltage	12V	24V	
	Output voltage range	11.4-14V	22.8-28V	
	Rated output current	10A	5A	
	Load regulation	±1.5%	±1.0%	
	Ripple & Noise	80mV@25°C	100mV@25°C	
	Temperature coefficient	±0.2%/°C		
	Overshoot voltage	≤5%		
	Voltage overshoot range	12V±5%	24V±5%	
	Output rise time	< 60ms		
	Power-on delay	≤3.0S@230Vac		
Input data	Hold-up time	≥20ms@230Vac; ≥10ms@115Vac		
	Capacitive load	500μ F/A		
	AC voltage range	90~264Vac		
	DC voltage	127~370Vdc		
	Rated voltage	115Vac; 230Vac		
	Frequency range	47~63Hz		
	PFC	≥0.93/230Vac, ≥0.96/115Vac, @12V/10A; ≥0.93/230Vac, ≥0.96/115Vac, @24V/5A		
	Inrush current	35A@115Vac; 70A@230Vac, 25°C, Cold start		
	Standby power loss	< 2.5W/230Vac@12V/0A	< 2.5W/230Vac@24V/0A	
	Efficiency	≥86.5%/230Vac@12V/10A	≥89.5%/230Vac@24V/5A	
Protection	Maximum over-voltage	≤17V	≤34V	
	Over-current	110%~150%		
	Input under-voltage protection	< 80Vac/112Vdc		
Operating environment	Operating temperature	-20°C~70°C (> 55°C starts to derating)		
	Storage temperature	-40°C to +85°C		
	Humidity	5%~95% (non-condensing)		
	Vibration standard	Acc.to IEC60068-2-6, 10 ~ 500Hz, 2G 10 min /1 cycle, 60 min/each axis direction (X, Y, Z)		
Others	Weight, approx.	< 0.75kg		
	MTBF	500,000 H		
Safety&EMC	RE/CE	Standard: EN55032/GB9254 Class B		
	Harmonic Current	Standard: IEC61000-3-2/GB17625.1 Class A		

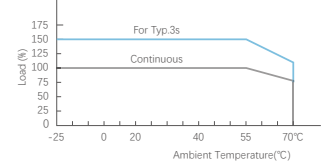
120W Product size: 40.5 x 125.4 x 110.5mm



Derating Curve of Input Voltage



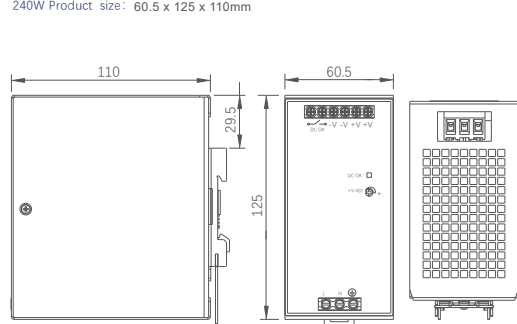
Derating Curve of Ambient Temperature



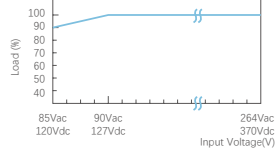
Technical specification (240W Din-Rail Power Supply)

	Technical specification	SLD-240-24	SLD-240-48
Output data	DC rated voltage	24V	48V
	Output voltage range	22.8-28V	46-56V
	Rated output current	10A	5A
	Load regulation	±1.0%	
	Ripple & Noise	100mV@25°C	150mV@25°C
	Temperature coefficient	±0.2%/°C	
	Overshoot voltage	≤5%	
	Voltage overshoot range	24V±5%	48V±5%
	Output rise time	< 100ms	< 100ms
	Power-on delay	≤3.0S@230Vac	
Hold-up time	≥20ms@230Vac; ≥10ms@115Vac		
Capacitive load	500μ F/A		
Input data	AC voltage range	90~264Vac	
	DC voltage	127~370Vdc	
	Rated voltage	115Vac; 230Vac	
	Frequency range	47~63Hz	
	PFC	≥0.95/230Vac, ≥0.99/115Vac, @24V/10A; ≥0.95/230Vac, ≥0.99/115Vac, @48V/5A	
	Inrush current	35A@115Vac; 60A@230Vac, 25°C, Cold start	
	Standby power loss	< 4.0W/230Vac@24V/0A; < 4.0W/230Vac@48V/0A	
Protection	Efficiency	≥92%/230Vac@24V/10A	≥92%/230Vac@48V/5A
	Maximum over-voltage	≤34V	≤64V
Operating environment	Over-current	110%~150%	
	Input under-voltage protection	< 80Vac/112Vdc	
	Operating temperature	-25°C to +70°C (> 55°C starts to derating)	
Others	Storage temperature	-40°C to +85°C	
	Humidity	5%~95% (non-condensing)	
	Vibration standard	Acc.to IEC60068-2-6, 10 ~ 500Hz.2G 10 min /1 cycle, 60 min/each axis direction (X、Y、Z)	
Safety&EMC	Weight, approx.	< 1kg	
	MTBF	500,000 H	
Safety&EMC	RE/CE	Standard: EN55032/GB9254 Class B	
	Harmonic Current	Standard: IEC61000-3-2/GB17625.1 Class A	

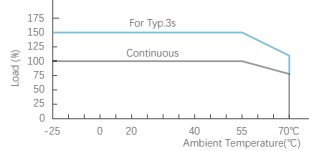
240W Product size: 60.5 x 125 x 110mm



Derating Curve of Input Voltage



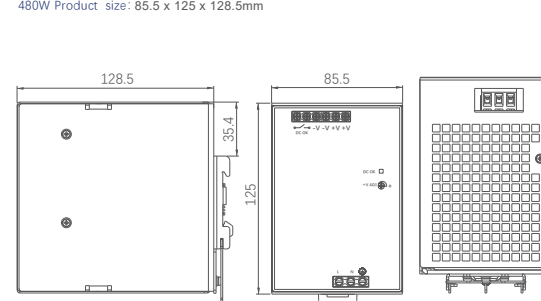
Derating Curve of Ambient Temperature



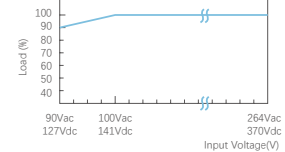
Technical specification (480W Din-Rail Power Supply)

	Technical specification	SLD-480-24	SLD-480-48
Output data	DC rated voltage	24V	48V
	Output voltage range	22.8-28V	46-56V
	Rated output current	20A	10A
	Load regulation	±1.0%	
	Ripple & Noise	100mV@25°C	150mV@25°C
	Temperature coefficient	±0.2%/°C	
	Overshoot voltage	≤5%	
	Voltage overshoot range	24V±5%	48V±5%
	Output rise time	< 60ms	
	Power-on delay	≤3.0S@230Vac	
Hold-up time	≥20ms@230Vac; ≥10ms@115Vac		
Capacitive load	500μ F/A		
Input data	AC voltage range	90~264Vac	
	DC voltage	127~370Vdc	
	Rated voltage	115Vac; 230Vac	
	Frequency range	47~63Hz	
	PFC	≥0.98/230Vac, ≥0.99/115Vac, @24V/20A; ≥0.98/230Vac, ≥0.99/115Vac, @48V/10A	
	Inrush current	10A@115Vac; 20A@230Vac, 25°C, cold start	
	Standby power loss	< 4.0W/230Vac@24V/0A; < 4.0W/230Vac@48V/0A	
Protection	Efficiency	≥93.5%/230Vac@24V/20A	≥94%/230Vac@48V/10A
	Maximum over-voltage	≤34V	≤65V
Operating environment	Over-current	110%~150%	
	Input under-voltage protection	< 80Vac/120Vdc	
	Operating temperature	-25°C to +70°C (> 55°C starts to derating)	
Others	Storage temperature	-40°C to +80°C	
	Humidity	5%~95% (non-condensing)	
	Vibration standard	Acc.to IEC60068-2-6, 10 ~ 500Hz.2G 10 min /1 cycle, 60 min/each axis direction (X、Y、Z)	
Safety&EMC	Weight, approx.	< 1.5kg	
	MTBF	500,000 H	
Safety&EMC	RE/CE	Standard: EN55032/GB9254 Class B	
	Harmonic Current	Standard: IEC61000-3-2/GB17625.1 Class A	

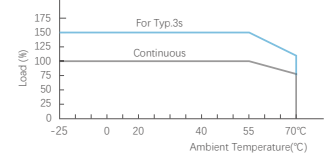
480W Product size: 85.5 x 125 x 128.5mm



Derating Curve of Input Voltage



Derating Curve of Ambient Temperature



Technical specification (960W Din-Rail Power Supply)

Technical specification		SLD-960-24
Output data	DC rated voltage	24V
	Output voltage range	24-28V
	Rated output current	40A
	Load regulation	±1.0%
	Ripple & Noise	120mV@25°C
	Temperature coefficient	±0.3%/°C
	Overshoot voltage	≤5%
	Voltage overshoot range	24V±5%
	Output rise time	<100ms
	Power-on delay	≤1.5S@230Vac
Input data	Hold-up time	≥15ms@230Vac
	Capacitive load	500μF/A
	AC voltage range	180~264Vac
	DC voltage	254~370Vdc
	Rated voltage	230Vac
	Frequency range	45~65Hz
	PFC	≥0.97/230Vac, @24V/40A
	Inrush current	<25A@230Vac, 25°C, Cold start
	Standby power loss	<6.5W/230Vac@24V/0A
	Efficiency	≥94%/230Vac@24V/40A
Protection	Maximum over-voltage	≤35V
	Over-current	105%~130%
	Input under-voltage protection	<175Vvac /24Vdc
Operating environment	Operating temperature	-30°C to +70°C (>50°C starts to derating)
	Storage temperature	-40°C to +85°C
	Humidity	5%~90% (non-condensing)
Others	Vibration standard	Acc.to IEC60068-2-6,10~500Hz, 2G 10 min /1 cycle, 60 min/each axis direction (X、Y、Z)
	Weight, approx.	<2.07kg
Safety&EMC	MTBF	150,000 H
	RE/CE	Standard: EN55032/GB9254 Class B
	Harmonic Current	Standard: IEC61000-3-2/GB17625.1 Class A

960W Product size : 110 x 126.5 x 129.4mm

