

# LRS-35/50

1U ULTRA-THIN SINGLE GROUP  
OUTPUT POWER SUPPLY

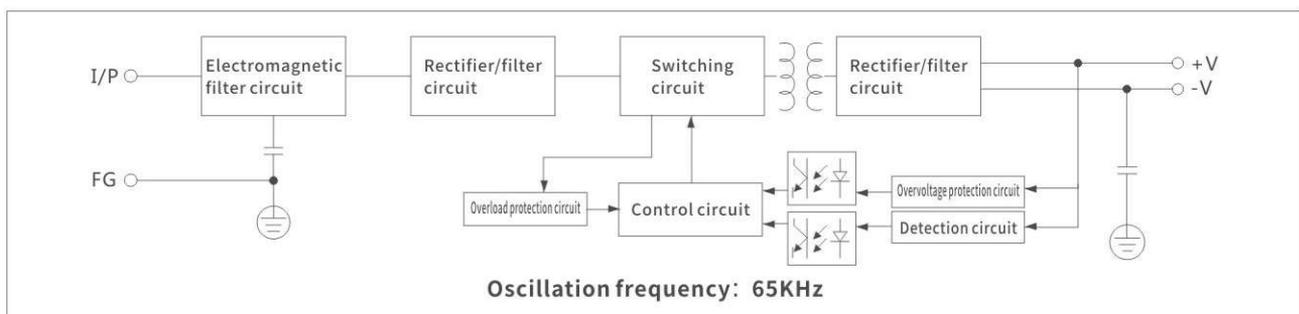


## Product overview

The LRS-35, 50 series is a 35, 50 single group output enclosed power supply with a 30mm low profile design and a full range of AC inputs of 85 to 264VAC. The entire series provides 5V, 12V, 15V, 24V, 36V, and 48V output.

In addition to the efficiency of up to 90%, the design of the metal mesh housing enhances the heat dissipation ability, allowing the LRS-35 and 50 to operate in the temperature range of -30 °C to +70 °C without a fan. Providing ultra-low no-load power consumption (less than 0.3W) makes it easy for the terminal system to meet international energy requirements. LRS-35 and 50 have complete protection functions and resistance to 5G vibration; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1 and GB4943 international safety regulations. The LRS-35, 50 series provide a cost-effective solution for various industrial applications.

## Principle diagram



# LRS-35 SERIES

1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY



## Technical parameter

Type	Technical indicators					
Output	DC voltage	5V	12V	24V	36V	48V
	Rated current	7A	3A	1.5A	1A	0.8A
	Rated power	35W	36W	36W	36W	38.4W
	Ripple and noise①	80mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	Voltage regulation range	±10%				
	Voltage precision	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation rate	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	Start up time	1000ms、30ms/230VAC 2000ms、30ms/115VAC(full load)				
	Hold time	30ms/230VAC 12ms/115VAC(full load)				
Input	Voltage range / frequency	85-264VAC /120-373VDC			47Hz~63Hz	
	Efficiency (typical)②	82%	86%	88%	88%	89%
	Working current	0.7A/115VAC 0.42A/230VAC				
	Shock current	Cold start: 45A/230VAC				
	leakage current	<1mA 240VAC				
Protection characteristics	Overload protection	≥110% - 130% Protection type: Hiccup mode, remove abnormal conditions and automatically return to normal				
	Overvoltage protection	≥115% - 145% Protection type: close the output, restart and automatically return to normal				
Environment	Operating temperature、humidity	-30°C~+70°C; 20%~90RH				
	Storage temperature、humidity	-40°C~+85°C; 10%~95RH				
Security	Pressure resistance	Input - output :4KVAC input - case :2KVAC output - case: 1.25KVAC duration :1 minute				
	Insulation impedance	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ 25 °C 70% RH				
Other	Size	98*82*30mm(L*W*H)				
	Net weight / gross weight	230g/246g				

Remarks

①Ripple and noise measurement method: use a 12 twisted pair, and connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure at 20MHz bandwidth.

② The efficiency is tested at the input voltage of 230VAC, rated load and ambient temperature of 25 °C. Precision: including setting error, linear adjustment rate and load adjustment rate.

Test method of linear regulation: test from low voltage to high voltage under rated load.

Load adjustment rate test method: from 0% to 100% of rated load.

The starting time is measured under the cold start state. Fast and frequent startup and shutdown may increase the starting time. When the operating altitude is higher than 2000 meters, the operating ambient temperature needs to be reduced by 5 °C/1000 meters.

# LRS-50 SERIES

1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY



## Technical parameter

Project		Technical index					
Output	DC voltage	5V	12V	15V	24V	36V	48V
	Rated current	10A	4.2A	3.3A	2.2A	1.45A	1.1A
	Rated power	50W	50.4W	49.5W	52.8W	52.2	52.8W
	Ripple and noise ①	80mVp-p	120mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p
	Ripple and noise	±10%					
	Voltage accuracy	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load adjustment rate	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Starting and rising time	1000ms、30ms/230VAC 2000ms、30ms/115VAC(full load)					
	Retention time	30ms/230VAC 12ms/115VAC(full load)					
Input	Voltage range / frequency	85-264VAC / 120-373VDC 47Hz~63Hz					
	Efficiency (typical) ②	83%	86%	88%	88%	89%	90%
	Working current	0.95A/115VAC 0.56A/230VAC					
	Impulse current	Cold boot: 45A/230VAC					
	Leakage current	< 1mA 240VACTime					
Protect	Overload protection	110%-130% Protection type: burping mode, automatic return to normal after removing abnormal conditions					
	Overvoltage protection	≥ 115% - 145% protection type: close output, restart and automatically return to normal					
Environmental Science	Working temperature and humidity	-30°C~+70°C; 20%~90RH					
	Storage temperature and humidity	-40°C~+85°C; 10%~95RH					
Safety regulations	Safety Standards	BIS IS 13252(PART 1):2010/ IEC 60950-1 : 2005 BS EN 55032:2015+A11:2020 BS EN 55035:2017+A11:2020 BS EN 61000-3-2:2019 8s EN 61000-3-3:2013+A1:2019 EN 61000-3-3:2013+A2:2021; EN IEC 55014-2: 2021.					
	Withstand voltage	Input output: 4kvac input shell: 2kvac output shell: 1.25kvac for 1 minute					
	Leakage current	5mA at 1.5kVac input-output					
	Leakage current	Input output at 220VAC < 1mA					
	Insulation impedance	Input output, input shell, output shell: 500VDC / 100M Ω 25 °C 70% RH					
Other	Size	98*82*30mm(L*W*H)					
	Net weight / gross weight	230g/246g					

# LRS-75

## 1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY

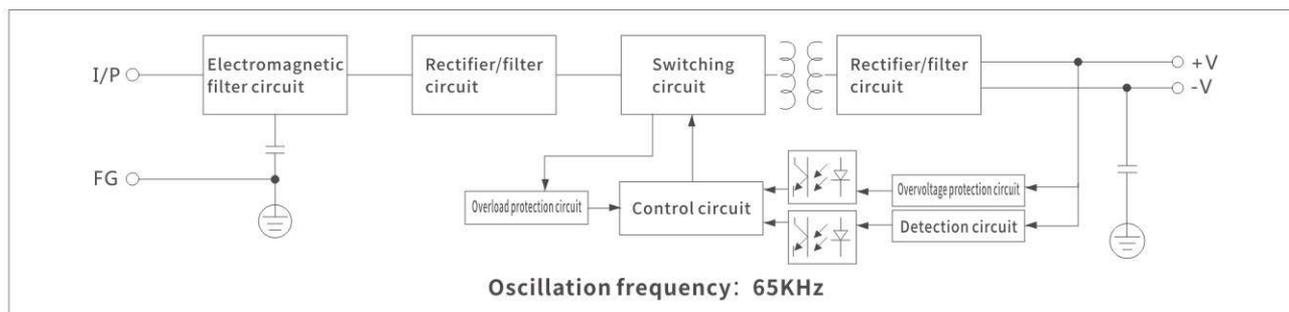


### Product overview

The LRS-75 series is a 75W single group output enclosed power supply with a 30mm low profile design and a full range of AC inputs of 85 to 264VAC. The entire series provides 5V, 12V, 15V, 24V, 36V, and 48V output.

In addition to the efficiency of up to 90%, the design of the metal mesh housing enhances the heat dissipation ability, allowing the LRS-75 to operate in the temperature range of -30 °C to +70 °C without a fan. Providing ultra-low no-load power consumption (less than 0.3W) makes it easy for the terminal system to meet international energy requirements. LRS-75 has complete protection functions and resistance to 5G vibration; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1 and GB4943 international safety regulations. The LRS-75 series provides a cost-effective solution for various industrial applications.

### Principle diagram



# LRS-75 SERIES

1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY



## Technical parameter

Type	Technical indicators					
Output	DC voltage	5V	12V	24V	36V	48V
	Rated current	14A	6A	3.2A	2.1A	1.6A
	Rated power	70W	72W	76.8W	75.6W	76.8W
	Ripple and noise <sup>①</sup>	100mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	Voltage regulation range	±10%				
	Voltage precision	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation rate	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	Start up time	500ms、30ms/230VAC 500ms、30ms/115VAC(full load)				
	Hold time	60ms/230VAC 12ms/115VAC(full load)				
Input	Voltage range / frequency	85-264VAC /120-373VDC			47Hz~63Hz	
	Efficiency (typical) <sup>②</sup>	82%	87%	89%	89%	89%
	Working current	1.4A/115VAC 0.85A/230VAC				
	Shock current	Cold start: 65A/230VAC				
	leakage current	<1mA 240VAC				
Protection characteristics	Overload protection	≥110% - 130% Protection type: Hiccup mode, remove abnormal conditions and automatically return to normal				
	Overvoltage protection	≥115% - 145% Protection type: close the output, restart and automatically return to normal				
Environment	Operating temperature、humidity	-30°C~+70°C; 20%~90RH				
	Storage temperature、humidity	-40°C~+85°C; 10%~95RH				
Security	Pressure resistance	Input - output :4KVAC input - case :2KVAC output - case: 1.25KVAC duration :1 minute				
	Insulation impedance	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ 25 °C 70% RH				
Other	Size	99*97*30mm(L*W*H)				
	Net weight / gross weight	250g/272g				
Remarks	<p>①Ripple and noise measurement method: use a 12 twisted pair, and connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure at 20MHz bandwidth.</p> <p>② The efficiency is tested at the input voltage of 230VAC, rated load and ambient temperature of 25 °C. Precision: including setting error, linear adjustment rate and load adjustment rate.</p> <p>Test method of linear regulation: test from low voltage to high voltage under rated load.</p> <p>Load adjustment rate test method: from 0% to 100% of rated load.</p> <p>The starting time is measured under the cold start state. Fast and frequent startup and shutdown may increase the starting time. When the operating altitude is higher than 2000 meters, the operating ambient temperature needs to be reduced by 5 °C/1000 meters.</p>					

# LRS-100

## 1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY

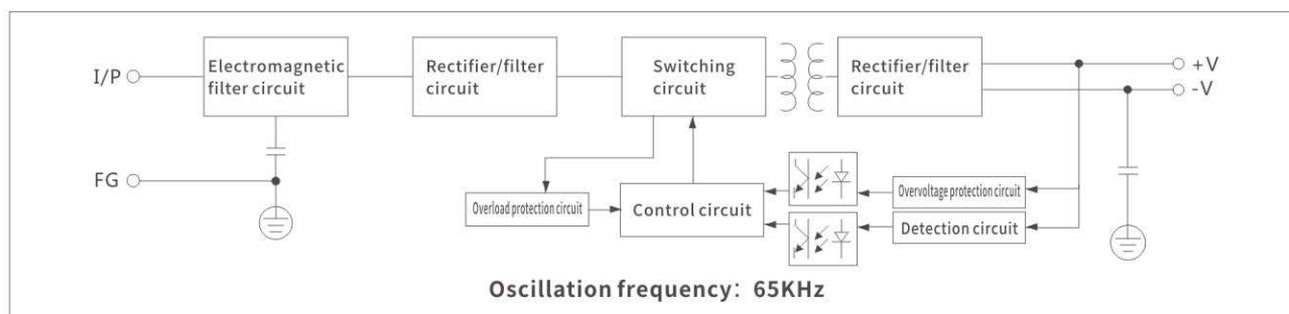


### Product overview

The LRS-100 series is a 100W single group output enclosed power supply with a 30mm low profile design and a full range of AC inputs of 85 to 264VAC. The entire series provides 5V, 12V, 15V, 24V, 36V, and 48V output.

In addition to the efficiency of up to 90%, the design of the metal mesh housing enhances the heat dissipation ability, allowing the LRS-100 to operate in the temperature range of -30 °C to +70 °C without a fan. Providing ultra-low no-load power consumption (less than 0.3W) makes it easy for the terminal system to meet international energy requirements. LRS-100 has complete protection functions and resistance to 5G vibration; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1 and GB4943 international safety regulations. The LRS-100 series provides a cost-effective solution for various industrial applications.

### Principle diagram



# LRS-100 SERIES

1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY



## Technical parameter

Type	Technical indicators					
Output	DC voltage	5V	12V	24V	36V	48V
	Rated current	18A	8.5A	4.5A	2.8A	2.3A
	Rated power	90W	102W	108W	100.8W	110.4W
	Ripple and noise <sup>①</sup>	100mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	Voltage regulation range	±10%				
	Voltage precision	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation rate	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	Start up time	500ms、30ms/230VAC 500ms、30ms/115VAC(full load)				
	Hold time	55ms/230VAC 10ms/115VAC(full load)				
Input	Voltage range / frequency	85-264VAC /120-373VDC			47Hz~63Hz	
	Efficiency (typical) <sup>②</sup>	82%	88%	89%	89%	90%
	Working current	1.9A/115VAC	1.2A/230VAC			
	Shock current	Cold start: 50A/230VAC				
	leakage current	<1mA 240VAC				
Protection characteristics	Overload protection	≥110% - 130% Protection type: Hiccup mode, remove abnormal conditions and automatically return to normal				
	Overvoltage protection	≥115% - 145% Protection type: close the output, restart and automatically return to normal				
Environment	Operating temperature、humidity	-30°C~+70°C; 20%~90RH				
	Storage temperature、humidity	-40°C~+85°C; 10%~95RH				
Security	Pressure resistance	Input - output :4KVAC input - case :2KVAC output - case: 1.25KVAC duration :1 minute				
	Insulation impedance	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ 25 °C 70% RH				
Other	Size	129*97*30mm(L*W*H)				
	Net weight / gross weight	340g/365g				
Remarks	<p>①Ripple and noise measurement method: use a 12 twisted pair, and connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure at 20MHz bandwidth.</p> <p>② The efficiency is tested at the input voltage of 230VAC, rated load and ambient temperature of 25 °C. Precision: including setting error, linear adjustment rate and load adjustment rate.</p> <p>Test method of linear regulation: test from low voltage to high voltage under rated load.</p> <p>Load adjustment rate test method: from 0% to 100% of rated load.</p> <p>The starting time is measured under the cold start state. Fast and frequent startup and shutdown may increase the starting time. When the operating altitude is higher than 2000 meters, the operating ambient temperature needs to be reduced by 5 °C/1000 meters.</p>					

# LRS-150

## 1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY

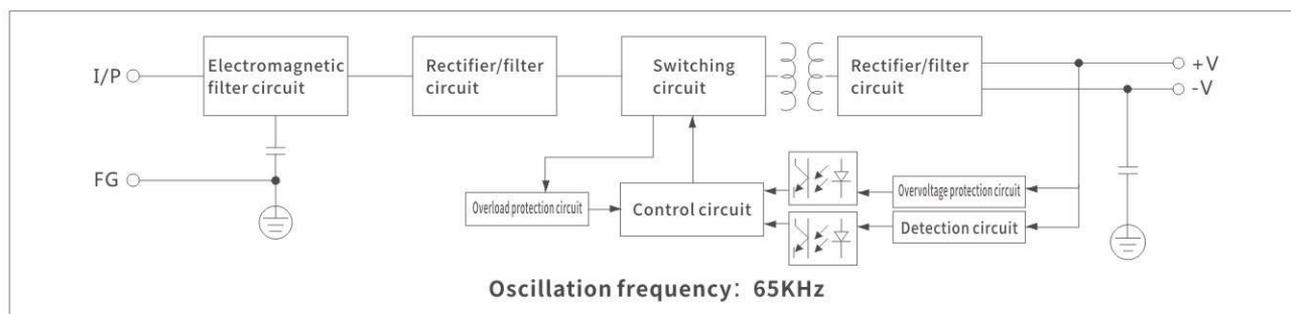


### Product overview

The LRS-150 series is a 150 single group output enclosed power supply with a 30mm low profile design and 110/220VAC selectable input. The entire series provides 5V, 12V, 15V, 24V, 36V, and 48V outputs.

In addition to the efficiency of up to 90%, the design of the metal mesh housing enhances the heat dissipation ability, allowing the LRS-150 to operate in the temperature range of -30 °C to +70 °C without a fan. Providing ultra-low no-load power consumption (less than 0.3W) makes it easy for the terminal system to meet international energy requirements. The LRS-150 has complete protection functions and resistance to 5G vibration; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1 and GB4943 international safety regulations. The LRS-150 series provides a cost-effective solution for various industrial applications.

### Principle diagram



# LRS-150 SERIES

1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY



## Technical parameter

Type	Technical indicators					
Output	DC voltage	5V	12V	24V	36V	48V
	Rated current	22A	12.5A	6.5A	4.3A	3.1A
	Rated power	110W	150W	156W	154.8W	148.8W
	Ripple and noise ①	100mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p
	Voltage regulation range	±10%				
	Voltage accuracy	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load adjustment rate	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	Starting up time	500ms、30ms/230VAC 500ms、30ms/115VAC(full load)				
	Hold time	40ms/230VAC 35ms/115VAC(full load)				
Input	Voltage range/frequency	85-132VAC/170-264VAC select by switch/240-370VDC 47Hz~63Hz				
	Efficiency (typical) ②	80%	87%	89%	89%	90%
	Operating current	2A/115VAC 1.3A/230VAC				
	Impulse current	Cold start: 60A/230VAC				
	Leakage current	<1mA 240VAC				
Protection characteristics	Overload protection	≥110% - 130% Protection type: Hiccup mode, remove abnormal conditions and automatically return to normal				
	Overvoltage protection	≥115% - 145% Protection type: close the output, restart and automatically return to normal				
	Over temperature protection	≥ 90 °C protection type: close the output, restart and automatically restore to normal				
Environment	Operating temperature、humidity	-30°C~+70°C; 20%~90RH				
	Storage temperature、humidity	-40°C~+85°C; 10%~95RH				
Security	Withstand voltage	Input - output :4KVAC input - case :2KVAC output - case: 1.25KVAC duration :1 minute				
	Insulation impedance	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ 25 °C 70% RH				
Other	Size	159*97*30mm(L*W*H)				
	Net weight/gross weight	480g/513g				
Remarks	<p>①Ripple and noise measurement method: use a 12 twisted pair, and connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure at 20MHz bandwidth.</p> <p>② The efficiency is tested at the input voltage of 230VAC, rated load and ambient temperature of 25 °C. Precision: including setting error, linear adjustment rate and load adjustment rate.</p> <p>Test method of linear regulation: test from low voltage to high voltage under rated load.</p> <p>Load adjustment rate test method: from 0% to 100% of rated load.</p> <p>The starting time is measured under the cold start state. Fast and frequent startup and shutdown may increase the starting time. When the operating altitude is higher than 2000 meters, the operating ambient temperature needs to be reduced by 5 °C/1000 meters.</p>					

# LRS-200/350

1U ULTRA-THIN SINGLE GROUP  
OUTPUT POWER SUPPLY

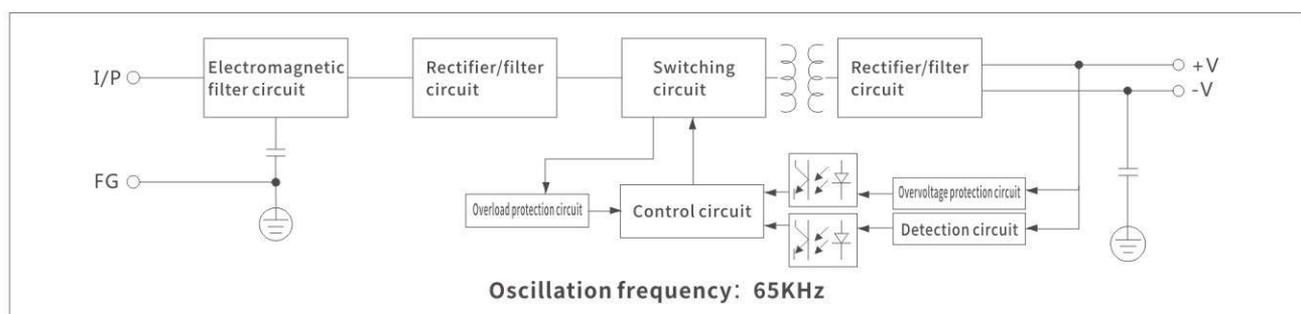


## Product overview

The LRS-200, 350 series are 200, 350 single group output enclosed power supplies with a 30mm low profile design and 110/220VAC selectable inputs. The entire series provides 5V, 12V, 15V, 24V, 36V and 48V output.

In addition to the efficiency of up to 90%, the design of the metal mesh housing enhances the heat dissipation ability, allowing the LRS-200, 350 (350W with fan cooling) to operate in the temperature range of -25 °C to +70 °C without a fan. Providing ultra-low no-load power consumption (less than 0.3W) makes it easy for the terminal system to meet international energy requirements. The LRS-200, 350 have complete protection functions and resistance to 5G vibration; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1 and GB4943 international safety regulations. The LRS-200, 350 series provide a cost-effective solution for various industrial applications.

## Principle diagram



# LRS-200 SERIES

1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY



## Technical parameter

Type	Technical indicators					
Output	DC voltage	5V	12V	24V	36V	48V
	Rated current	40A	17A	8.8A	5.9A	4.4A
	Rated power	200W	204W	211.2W	212.4W	211.2W
	Ripple and noise ①	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p
	Voltage regulation range	±10%				
	Voltage accuracy	±3.0%	±1.5%	±1.0%	±1.0%	±1.0%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load adjustment rate	±2.0%	±1.0%	±0.5%	±0.5%	±0.5%
	Starting up time	1500ms、50ms/230VAC 1500ms、50ms/115VAC(full load)				
	Hold time	16ms/230VAC 12ms/115VAC(full load)				
Input	Voltage range/frequency	90-132VAC/180-264VAC select by switch/240-370VDC 47Hz~63Hz				
	Efficiency (typical) ②	81%	87%	89%	89%	90%
	Operating current	4A/115VAC 2.2A/230VAC				
	Impulse current	Cold start: 60A/115VAC 60A/230VAC				
	Leakage current	<1mA 240VAC				
Protection characteristics	Overload protection	≥110% - 130% Protection type: Hiccup mode, remove abnormal conditions and automatically return to normal				
	Overvoltage protection	≥115% - 145% Protection type: close the output, restart and automatically return to normal				
	Over temperature protection	≥ 90 °C protection type: close the output, restart and automatically restore to normal				
Environment	Operating temperature、humidity	-25°C~-70°C; 20%~90RH				
	Storage temperature、humidity	-40°C~+85°C; 10%~95RH				
Security	Withstand voltage	Input - output :4KVAC input - case :2KVAC output - case: 1.25KVAC duration :1 minute				
	Insulation impedance	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ 25 °C 70% RH				
Other	Size	215*115*30mm(L*W*H)				
	Net weight/gross weight	660g/727g				
Remarks	<p>①Ripple and noise measurement method: use a 12 twisted pair, and connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure at 20MHz bandwidth.</p> <p>② The efficiency is tested at the input voltage of 230VAC, rated load and ambient temperature of 25 °C. Precision: including setting error, linear adjustment rate and load adjustment rate.</p> <p>Test method of linear regulation: test from low voltage to high voltage under rated load.</p> <p>Load adjustment rate test method: from 0% to 100% of rated load.</p> <p>The starting time is measured under the cold start state. Fast and frequent startup and shutdown may increase the starting time. When the operating altitude is higher than 2000 meters, the operating ambient temperature needs to be reduced by 5 °C/1000 meters.</p>					

# LRS-350 SERIES

1U ULTRA-THIN SINGLE GROUP OUTPUT POWER SUPPLY



## Technical parameter

Project		Technical index					
Output	DC voltage	5V	12V	15V	24V	36V	48V
	Rated current	60A	29A	23.3A	14.6A	9.7A	7.3A
	Rated power	300W	348W	349.5W	350.4W	349.2W	350.4W
	Ripple and noise	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p
	Ripple and noise	±10%					
	Voltage accuracy	±3.0%	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load adjustment rate	±2.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	Starting and rising time	1500ms、50ms/230VAC 1500ms、50ms/115VAC(full load)					
	Retention time	16ms/230VAC 12ms/115VAC(full load)					
Input	Voltage range / frequency	90-132VAC/180-264VACSelect by switch / 240-370VDC 47Hz~63Hz					
	Efficiency (typical)	81%	86%	89%	89%	89%	90%
	Working current	6.8A/115VAC 3.4A/230VAC					
	Impulse current	Cold start: 60A/115VAC 60A/230VAC					
	Leakage current	<2mA 240VAC					
Protect	Overload protection	110% - 130% protection type: burping mode, automatic return to normal after removing abnormal conditions					
	Overvoltage protection	115% - 145% protection type: close the output, restart and automatically return to normal					
	Over temperature protection	Protection type ≥ 90 °C: burping mode, automatic return to normal after removing abnormal conditions					
Function	Fan on / off control	Rth3 ≥ 50 °C fan on ≤ 40 °C fan off					
Environmental Science	Working temperature and humidity	-25°C~+70°C; 20%~90RH					
	Storage temperature and humidity	-40°C~+85°C; 10%~95RH					
Safety regulations	Safety Standards	BIS IS 13252(PART 1):2010/ IEC 60950-1 :2005 BS EN 55032:2015+A11:2020 BS EN 55035:2017+A11:2020 BS EN 61000-3-2:2019 8s EN 61000-3-3:2013+A1:2019 EN 61000-3-3:2013+A2:2021; EN IEC 55014-2: 2021.					
	Withstand voltage	Input output:3KVAC Input - Housing:2KVAC Output - Housing:0.5KVAC 1 minute					
	Leakage current	5mA at 1.5kVac input-output					
	Leakage current	Input output at 220VAC < 1mA					
	Insulation impedance	Input output, input shell, output shell : 500VDC/100MΩ 25°C 70%RH					
Other	Size	215*115*30mm(L*W*H)					
	Net weight / gross weight	760g/827g					