

## AC-DC Power supply

# DPS series



### » Feature

- 35 mm width of DIN Rail Installation method
- Low output voltage fluctuation rate
- Low heating due to high efficiency
- DC OK Signal Relay Output Built-in
- Protection function for overcurrent, overvoltage, and overheating
- Various products from 15 W to 240 W
- Output ON Pilot Lamp (LED)
- Input voltage: 100 - 240 V Free Voltage or automatic selection of 110/220V



DIN Rail Type

### » Suffix code

Model	Code	Description
DPS-	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	DPS Power supply (DIN Rail Type)
Power output	15	15 W
	30	30 W
	50	50 W
	75	75 W
	100	100 W
	120	120 W
	180	180 W
	240	240 W (* Only DPS-240S-12 : 216 W)
Number of output voltage	S	1 Output [Single output]
Output voltage classification	05	5 V DC [DPS-75S, DPS-100S, DPS-120S, DPS-180S, DPS-240S Exclude]
	12	12 V DC [DPS-180S Exclude]
	15	15 V DC [DPS-75S, DPS-100S, DPS-120S, DPS-180S, DPS-240S Exclude]
	24	24 V DC
	48	48 V DC [DPS-15S, DPS-30S, DPS-50S Exclude]

# 15 Watt

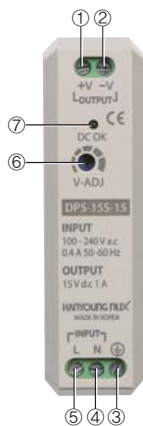
[5 V, 12 V, 15 V, 24 V DC]

## DPS series

### » Specification

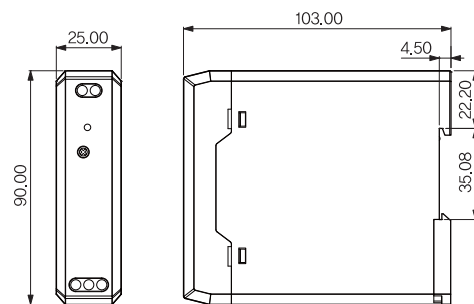
Model		DPS-15S-05	DPS-15S-12	DPS-15S-15	DPS-15S-24	
Output	Rated output voltage	5 V	12 V	15 V	24 V	
	Rated output current	3 A	1.2 A	1 A	0.63 A	
	Rated power output	15 W				
	Peak current	3.6 A	1.44 A	1.2 A	0.75 A	
	Circuit voltage fluctuation rate	±0.5 %	±0.5 %	±0.5 %	±0.5 %	
	Load voltage fluctuation rate	±1 %	±1 %	±1 %	±1 %	
	Ripple	80 mV p-p max	120 mV p-p max	120 mV p-p max	150 mV p-p max	
	Ambient temperature fluctuation	±1 %	±1 %	±1 %	±1 %	
	Running time	200 ms max (110 V AC, I <sub>o</sub> =100 %)				
	Remaining time	10 ms min (110 V AC, I <sub>o</sub> =100 %)				
	Voltage fluctuation range	4.6 - 5.3 V	11.2 - 13.7 V	13.6 - 16.1 V	22.6 - 27.6 V	
Voltage setting range	±1 % max (Rated output voltage)					
Input	Input voltage	100 - 240 V AC (※ Designed voltage range : 85 - 264 V AC)				
	Input frequency	50 - 60 Hz (47 - 63 Hz)				
	Current (A)	110 V AC	0.3	0.3	0.3	0.3
		220 V AC	0.16	0.16	0.16	0.16
	Efficiency	220 V AC	76 %	81 %	82 %	86 %
	Inrush current	110 V AC	20 A Typ. (T <sub>a</sub> =25 °C, I <sub>o</sub> =100 % at Cold start)			
		220 V AC	40 A Typ. (T <sub>a</sub> =25 °C, I <sub>o</sub> =100 % at Cold start)			
Leakage current	110 V AC	0.35 mA max				
	220 V AC	0.75 mA max				
Protection function	Over current protection	Protective function performed within 110 ~ 200 % of the rated output current				
	Over voltage protection	6.8 - 7.9 V	14.5 - 17.2 V	17.5 - 20.5 V	30 - 36 V	
	Overheating protection	Protection circuit is in operation when PWM controller's junction temperature is over 135-140°C.				
	Protection of output short	Auto Re-start				
	DC OK Signal	Green LED (ON when output voltage is normal)				
ETC	Dielectric strength	2,700 V AC for 1 min, Detection current = 10 mA, (Input - Output)				
		1,500 V AC for 1 min, Detection current = 10 mA, (Input - FG)				
		500 V AC for 1 min, Detection current = 10 mA, (Output - FG)				
		500 V AC for 1 min, Detection current = 10 mA, (Output - DC OK)				
Insulation resistance	50 MΩ min. (Input - Output, FG), (Output - FG, DC OK)					
Environment	Ambient temperature	- 25 ~ +50 °C (Refer to the derating curve of output load )				
	Ambient humidity	20 ~ 90 % RH (With no condensation)				
	Storage temperature	- 40 ~ +85 °C (With no condensation)				
	Vibration resistance	10 - 55 Hz, peak amplitude 0.375 mm, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)				
	Shock resistance	150 %, 3 times for each of 6 directions . (State of packing)				
	Weight	150 g	144 g	144 g	140 g	

### » Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	DC output terminal
②	-V OUT	
③	⊕	FG
④	AC(N)	AC Input terminal
⑤	AC(L)	
⑥	V-ADJ	Output voltage variable volume
⑦	DC OK	Output indication LED

### » Dimension (Unit : mm)



# 30 Watt

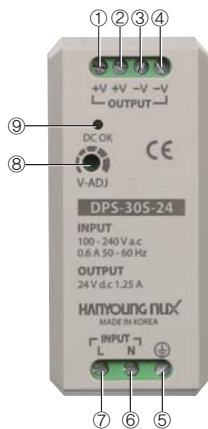
(5 V, 12 V, 15 V, 24 V DC)

## DPS series

### » Specification

Model		DPS-30S-05	DPS-30S-12	DPS-30S-15	DPS-30S-24	
Output	Rated output voltage	5 V	12 V	15 V	24 V	
	Rated output current	6 A	2.5 A	2 A	1.25 A	
	Rated power output	30 W				
	Peak current	7.2 A	3.0 A	2.4 A	1.5 A	
	Circuit voltage fluctuation rate	±0.5 %	±0.5 %	±0.5 %	±0.5 %	
	Load voltage fluctuation rate	±1 %	±1 %	±1 %	±1 %	
	Ripple	80 mV p-p max	120 mV p-p max	120 mV p-p max	150 mV p-p max	
	Ambient temperature fluctuation	±1 %	±1 %	±1 %	±1 %	
	Running time	200 ms max (110 V AC, lo=100 %)				
	Remaining time	10 ms min (110 V AC, lo=100 %)				
	Voltage fluctuation range	4.6 - 5.3 V	11.2 - 13.7 V	13.6 - 16.1 V	22.6 - 27.6 V	
Voltage setting range	±1 % max (Rated output voltage)					
Input	Input voltage	100 - 240 V AC (※ Designed voltage range : 85 - 264 V AC)				
	Input frequency	50 - 60 Hz (47 - 63 Hz)				
	Current (A)	110 V AC	0.53	0.53	0.53	0.53
		220 V AC	0.3	0.3	0.3	0.3
	Efficiency	220 V AC	82 %	85 %	86 %	86 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 °C, lo=100 % at Cold start)			
		220 V AC	40 A Typ. (Ta=25 °C, lo=100 % at Cold start)			
Leakage current	110 V AC	0.35 mA max				
	220 V AC	0.75 mA max				
Protection function	Over current protection	Protective function performed within 110 ~ 200 % of the rated output current				
	Over voltage protection	6.8 - 7.9 V	14.5 - 17.2 V	17.5 - 20.5 V	30 - 36 V	
	Overheating protection	Protection circuit is in operation when PWM controller's junction temperature is over 135-140°C.				
	Protection of output short	Auto Re-start				
	DC OK Signal	Green LED (ON when output voltage is normal)				
ETC	Dielectric strength	2,700 V AC for 1 min, Detection current = 10 mA, (Input - Output)				
		1,500 V AC for 1 min, Detection current = 10 mA, (Input - FG)				
		500 V AC for 1 min, Detection current = 10 mA, (Output - FG)				
		500 V AC for 1 min, Detection current = 10 mA, (Output - DC OK)				
Insulation resistance	50 MΩ min. (Input - Output, FG), (Output - FG, DC OK)					
Environment	Ambient temperature	- 25 ~ +70 °C (Refer to the derating curve of output load)				
	Ambient humidity	20 ~ 90 % RH (With no condensation)				
	Storage temperature	- 40 ~ +85 °C (With no condensation)				
	Vibration resistance	10 - 55 Hz, peak amplitude 0.375 mm, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)				
	Shock resistance	150 %, 3 times for each of 6 directions (State of packing)				
	Weight	262 g	242 g	242 g	244 g	

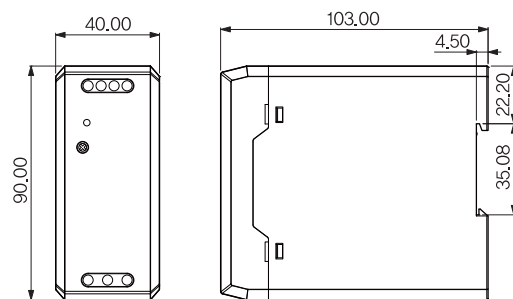
### » Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②		
③	-V OUT	- Output terminal
④		
⑤	⊕	FG
⑥	AC (N)	AC Input terminal
⑦	AC (L)	
⑧	V-ADJ	Output voltage variable volume
⑨	DC OK	Output indication LED

※ Terminal ① and ② are connected inside the device  
Terminal ③ and ④ are connected inside the device

### » Dimension (Unit : mm)



# 50 Watt

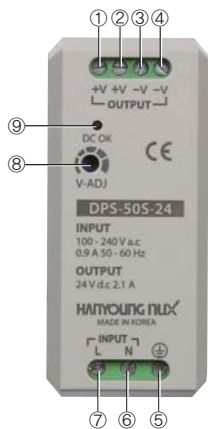
(5 V, 12 V, 15 V, 24 V DC)

## DPS series

### » Specification

Model		DPS-50S-05	DPS-50S-12	DPS-50S-15	DPS-50S-24	
Output	Rated output voltage	5 V	12 V	15 V	24 V	
	Rated output current	10 A	4.2 A	3.4 A	2.1 A	
	Rated power output	50 W				
	Peak current	12 A	5.04 A	4.08 A	2.52 A	
	Circuit voltage fluctuation rate	±0.5 %	±0.5 %	±0.5 %	±0.5 %	
	Load voltage fluctuation rate	±1 %	±1 %	±1 %	±1 %	
	Ripple	80 mV p-p max	120 mV p-p max	120 mV p-p max	150 mV p-p max	
	Ambient temperature fluctuation	±1 %	±1 %	±1 %	±1 %	
	Running time	200 ms max (110 V AC, lo=100 %)				
	Remaining time	10 ms min (110 V AC, lo=100 %)				
	Voltage fluctuation range	4.6 - 5.3 V	11.2 - 13.7 V	13.6 - 16.1 V	22.6 - 27.6 V	
	Voltage setting range	±1 % max (Rated output voltage)				
Input	Input voltage	100 - 240 V AC (※ Designed voltage range : 85 - 264 V AC)				
	Input frequency	50 - 60 Hz (47 - 63 Hz)				
	Current (A)	110 V AC	0.9	0.9	0.9	0.9
		220 V AC	0.5	0.5	0.5	0.5
	Efficiency	220 V AC	81 %	86 %	88 %	88 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 °C, lo=100 % at Cold start)			
		220 V AC	40 A Typ. (Ta=25 °C, lo=100 % at Cold start)			
Leakage current	110 V AC	0.35 mA max				
	220 V AC	0.75 mA max				
Protection function	Over current protection	Protective function performed within 110 ~ 200 % of the rated output current				
	Over voltage protection	6.8 - 7.9 V	14.5 - 17.2 V	17.5 - 20.5 V	30 - 36 V	
	Overheating protection	Protection circuit is in operation when PWM controller's junction temperature is over 135-140°C.				
	Protection of output short	Auto Re-start				
	DC OK Signal	Green LED (ON when output voltage is normal)				
ETC	Dielectric strength	2,700 V AC for 1 min, Detection current = 10 mA, (Input - Output)				
		1,500 V AC for 1 min, Detection current = 10 mA, (Input - FG)				
		500 V AC for 1 min, Detection current = 10 mA, (Output - FG)				
		500 V AC for 1 min, Detection current = 10 mA, (Output - DC OK)				
Insulation resistance	50 MΩ min. (Input - Output, FG), (Output - FG, DC OK)					
Environment	Ambient temperature	- 25 ~ +70 °C (Refer to the derating curve of output load)				
	Ambient humidity	20 ~ 90 % RH (With no condensation)				
	Storage temperature	- 40 ~ +85 °C (With no condensation)				
	Vibration resistance	10 - 55 Hz, peak amplitude 0.375 mm, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)				
	Shock resistance	150 %, 3 times for each of 6 directions (State of packing)				
	Weight	274 g	270 g	268 g	266 g	

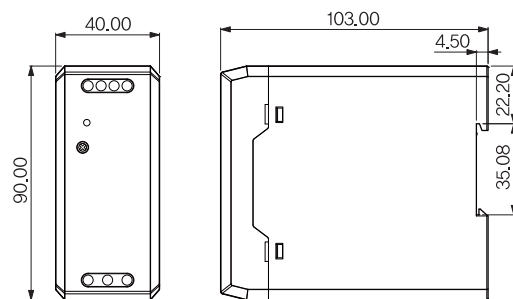
### » Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②		- Output terminal
③	FG	FG
④		FG
⑤	AC Input terminal	AC Input terminal
⑥		AC Input terminal
⑦	V-ADJ	Output voltage variable volume
⑧		Output voltage variable volume
⑨	DC OK	Output indication LED

※ Terminal ① and ② are connected inside the device  
Terminal ③ and ④ are connected inside the device

### » Dimension (Unit : mm)



# 75 Watt

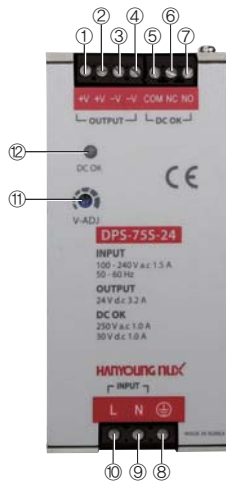
( 12 V, 24 V, 48 V DC)

## DPS series

### » Specification

Model		DPS-75S-12	DPS-75S-24	DPS-75S-48	
Output	Rated output voltage	12 V	24 V	48 V	
	Rated output current	6.25 A	3.13 A	1.57 A	
	Rated power output	75 W			
	Peak current	7.5 A	3.8 A	1.9 A	
	Circuit voltage fluctuation rate	±0.5 %	±0.5 %	±0.5 %	
	Load voltage fluctuation rate	±1 %	±1 %	±1 %	
	Ripple	120 mV max	150 mV max	240 mV max	
	Ambient temperature fluctuation	±1 %	±1 %	±1 %	
	Running time	200 ms max (110 V AC, Io=100 %)			
	Remaining time	10 ms min (110 V AC, Io=100 %)			
	Voltage fluctuation range	11.2 - 13.7 V	22.6 - 27.6 V	45.2 - 50.1 V	
Voltage setting range	±1 % max (Rated output voltage)				
Input	Input voltage	100 - 240 V AC (※Designed voltage range : 85 - 264 V AC)			
	Input frequency	50 - 60 Hz (47 - 63 Hz)			
	Current (A)	110 V AC	1.3	1.3	1.3
		220 V AC	0.71	0.71	0.71
	Efficiency	220 V AC	85 %	86 %	90 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 °C, Io=100 % at Cold start)		
		220 V AC	40 A Typ. (Ta=25 °C, Io=100 % at Cold start)		
Leakage current	110 V AC	0.35 mA max			
	220 V AC	0.75 mA max			
Protection function	Over current protection	Protective function performed within 110 ~ 200 % of the rated output current			
	Over voltage protection	14 - 18 V	30 - 34 V	59 - 63 V	
	Overheating protection	Protection circuit is in operation when PWM controller's junction temperature is over 135~140°C			
	Protection of output short	Auto Re-start			
	DC OK Signal	Green LED (ON when output voltage is normal)			
	DC OK Output	Relay output (ON when rated output is over 85%), 250 V AC 1 A max, 30 V DC 1 A max)			
ETC	Dielectric strength	2,700 V AC for 1 min, Detection current = 10 mA, (Input - Output)			
		1,500 V AC for 1 min, Detection current = 10 mA, (Input - FG)			
		500 V AC for 1 min, Detection current = 10 mA, (Output - FG)			
		500 V AC for 1 min, Detection current = 10 mA, (Output - DC OK)			
Insulation resistance	50 MΩ min. (Input - Output, FG), (Output - FG, DC OK)				
Environment	Ambient temperature	- 25 ~ +70 °C (Refer to the derating curve of output load)			
	Ambient humidity	20 ~ 90 % RH (With no condensation)			
	Storage temperature	- 40 ~ +85 °C (With no condensation)			
	Vibration resistance	10 - 55 Hz, peak amplitude 0.375 mm, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)			
	Shock resistance	150 %, 3 times for each of 6 directions (State of packing)			
	Weight	536 g	528 g	524 g	

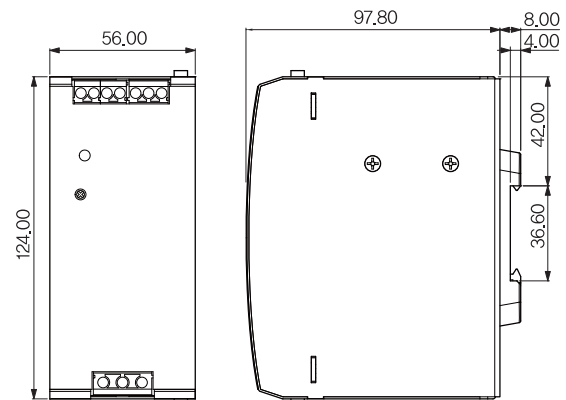
### » Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②	-V OUT	- Output terminal
③	COM	DC OK Relay output
④	NC	
⑤	COM	DC OK Relay output
⑥	NC	
⑦	NO	DC OK Relay output
⑧	⊕	FG
⑨	AC (N)	AC Input terminal
⑩	AC (L)	
⑪	V-ADJ	Output voltage variable volume
⑫	DC OK	Output indication LED

※ Terminal ① and ② are connected inside the device  
Terminal ③ and ④ are connected inside the device

### » Dimension (Unit : mm)



# 100 Watt

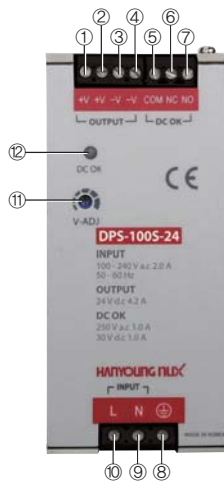
( 12 V, 24 V, 48 V DC )

## DPS series

### » Specification

Model		DPS-100S-12	DPS-100S-24	DPS-100S-48	
Output	Rated output voltage	12 V	24 V	48 V	
	Rated output current	7.5 A	4.2 A	2.1 A	
	Rated power output	90 W	100 W	100 W	
	Peak current	9.0 A	5.0 A	2.5 A	
	Circuit voltage fluctuation rate	±0.5 %	±0.5 %	±0.5 %	
	Load voltage fluctuation rate	±1 %	±1 %	±1 %	
	Ripple	120 mV max	150 mV max	240 mV max	
	Ambient temperature fluctuation	±1 %	±1 %	±1 %	
	Running time	200 ms max (110 V AC, I <sub>o</sub> =100 %)			
	Remaining time	10 ms min (110 V AC, I <sub>o</sub> =100 %)			
	Voltage fluctuation range	11.2 - 13.7 V	22.6 - 27.6 V	45.2 - 50.1 V	
	Voltage setting range	±1 % max (Rated output voltage)			
Input	Input voltage	100 - 120 V AC / 200 - 240 V AC ※ Auto-select input			
	Input frequency	50 - 60 Hz (47 - 63 Hz)			
	Current (A)	110 V AC	0.93	0.9	0.9
		220 V AC	1.72	1.7	1.7
	Efficiency	220 V AC	86 %	88 %	88 %
	Inrush current	110 V AC	20 A Typ. (T <sub>a</sub> =25 °C, I <sub>o</sub> =100 % at Cold start)		
		220 V AC	40 A Typ. (T <sub>a</sub> =25 °C, I <sub>o</sub> =100 % at Cold start)		
Leakage current	110 V AC	0.35 mA max			
	220 V AC	0.75 mA max			
Protection function	Over current protection	Protective function performed within 110 ~ 200 % of the rated output current			
	Over voltage protection	14 - 18 V	30 - 34 V	59 - 63 V	
	Overheating protection	Protection circuit is in operation when PWM controller's junction temperature is over 135-140°C.			
	Protection of output short	Auto Re-start			
	DC OK Signal	Green LED (ON when output voltage is normal)			
	DC OK Output	Relay output (ON when rated output is over 85%), 250 V AC 1 A max, 30 V DC 1 A max)			
ETC	Dielectric strength	2,700 V AC for 1 min, Detection current = 10 mA, (Input - Output)			
		1,500 V AC for 1 min, Detection current = 10 mA, (Input - FG)			
		500 V AC for 1 min, Detection current = 10 mA, (Output - FG)			
		500 V AC for 1 min, Detection current = 10 mA, (Output - DC OK)			
Insulation resistance	50 MΩ min. (Input - Output, FG), (Output - FG, DC OK)				
Environment	Ambient temperature	- 25 ~ +70 °C (Refer to the derating curve of output load)			
	Ambient humidity	20 ~ 90 % RH (With no condensation)			
	Storage temperature	- 40 ~ +85 °C (With no condensation)			
	Vibration resistance	10 - 55 Hz, peak amplitude 0.375 mm, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)			
	Shock resistance	150 %, 3 times for each of 6 directions (State of packing)			
	Weight	556 g	558 g	562 g	

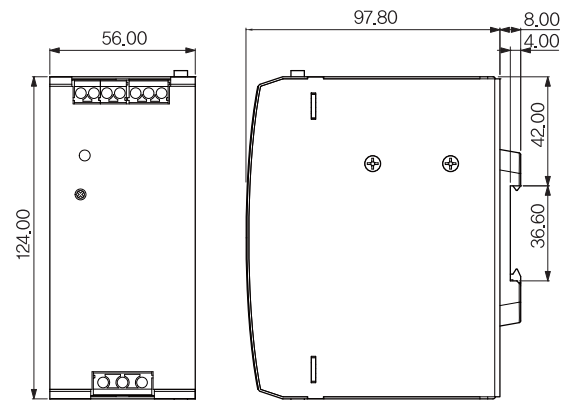
### » Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②	-V OUT	- Output terminal
③	COM	DC OK Relay output
④	NC	
⑤	COM	FG
⑥	NC	
⑨	AC (N)	AC Input terminal
⑩	AC (L)	
⑪	V-ADJ	Output voltage variable volume
⑫	DC OK	Output indication LED

※ Terminal ① and ② are connected inside the device  
Terminal ③ and ④ are connected inside the device

### » Dimension (Unit : mm)



# 120 Watt

( 12 V, 24 V, 48 V DC )

## DPS series

### » Specification

Model		DPS-120S-12	DPS-120S-24	DPS-120S-48	
Output	Rated output voltage	12 V	24 V	48 V	
	Rated output current	10 A	5 A	2.5 A	
	Rated power output	120 W			
	Peak current	12 A	6 A	3 A	
	Circuit voltage fluctuation rate	±0.5 %	±0.5 %	±0.5 %	
	Load voltage fluctuation rate	±1 %	±1 %	±1 %	
	Ripple	120 mV max	150 mV max	240 mV max	
	Ambient temperature fluctuation	±1 %	±1 %	±1 %	
	Running time	700 ms max (110 V AC, I <sub>o</sub> =100 %)			
	Remaining time	30 ms min (110 V AC, I <sub>o</sub> =100 %)			
	Voltage fluctuation range	11.2 - 13.7 V	22.6 - 27.6 V	45.2 - 50.1 V	
	Voltage setting range	±1 % max (Rated output voltage)			
Input	Input voltage	100 - 120 V AC / 200 - 240 V AC ※ Auto-select input			
	Input frequency	50 - 60 Hz (47 - 63 Hz)			
	Current (A)	110 V AC	2.1	2.1	2.1
		220 V AC	1.1	1.1	1.1
	Efficiency	220 V AC	83 %	87 %	88 %
	Inrush current	110 V AC	20 A Typ. (T <sub>a</sub> =25 °C, I <sub>o</sub> =100 % at Cold start)		
		220 V AC	40 A Typ. (T <sub>a</sub> =25 °C, I <sub>o</sub> =100 % at Cold start)		
Leakage current	110 V AC	0.35 mA max			
	220 V AC	0.75 mA max			
Protection function	Over current protection	Protective function performed within 110 ~ 200 % of the rated output current			
	Over voltage protection	14 - 18 V	30 - 34 V	59 - 63 V	
	Overheating protection	Protection circuit is in operation when PWM controller's junction temperature is over 135~140°C.			
	Protection of output short	Auto Re-start			
	DC OK Signal	Green LED (ON when output voltage is normal)			
ETC	Dielectric strength	2,700 V AC for 1 min, Detection current = 10 mA, (Input - Output)			
		1,500 V AC for 1 min, Detection current = 10 mA, (Input - FG)			
		500 V AC for 1 min, Detection current = 10 mA, (Output - FG)			
		500 V AC for 1 min, Detection current = 10 mA, (Output - DC OK)			
	Insulation resistance	50 MΩ min. (Input - Output, FG), (Output - FG, DC OK)			
Environment	Ambient temperature	- 25 ~ +70 °C (Refer to the derating curve of output load)			
	Ambient humidity	20 ~ 90 % RH (With no condensation)			
	Storage temperature	- 40 ~ +85 °C (With no condensation)			
	Vibration resistance	10 - 55 Hz, peak amplitude 0.375 mm, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)			
	Shock resistance	150 %, 3 times for each of 6 directions (State of packing)			
Weight	670 g	658 g	654 g		

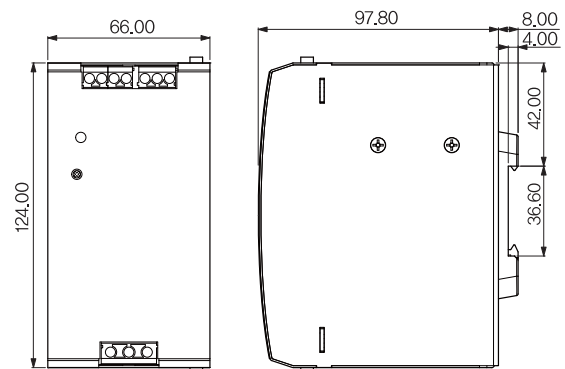
※ Auto-select input selects input voltage automatically without input output 100-120 V AC or 200 - 240 V AC.

### » Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②	-V OUT	- Output terminal
③	COM	DC OK Relay output
④	NC	
⑤	NO	
⑥	⊕	FG
⑦	AC (N)	AC Input terminal
⑧	AC (L)	
⑨	V-ADJ	Output voltage variable volume
⑩	DC OK	Output indication LED

### » Dimension (Unit : mm)



※ Terminal ① and ② are connected inside the device  
Terminal ③ and ④ are connected inside the device

# 180 Watt

( 12 V, 24 V, 48 V DC)

## DPS series

### » Specification

Model		DPS-180S-24	DPS-180S-48	
Output	Rated output voltage	24 V	48 V	
	Rated output current	7.5 A	3.8 A	
	Rated power output	180 W	180 W	
	Peak current	9 A	4.6 A	
	Circuit voltage fluctuation rate	±0.5 %	±0.5 %	
	Load voltage fluctuation rate	±1 %	±1 %	
	Ripple	150 mV max	240 mV max	
	Ambient temperature fluctuation	±1 %	±1 %	
	Running time	700 ms max (110 V AC, Io=100 %)		
	Remaining time	30 ms min (110 V AC, Io=100 %)		
	Voltage fluctuation range	22.6 - 27.6 V	45.2 - 50.1 V	
	Voltage setting range	±1 % max (Rated output voltage)		
Input	Input voltage	100 - 120 V AC / 200 - 240 V AC ※ Auto-select input		
	Input frequency	50 - 60 Hz (47 - 63 Hz)		
	Current (A)	110 V AC	3.3	3.3
		220 V AC	91	91
	Efficiency	220 V AC	1.95 %	1.95 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 °C, Io=100 % at Cold start)	
		220 V AC	40 A Typ. (Ta=25 °C, Io=100 % at Cold start)	
Leakage current	110 V AC	0.35 mA max		
	220 V AC	0.75 mA max		
Protection function	Over current protection	Protective function performed within 110 ~ 200 % of the rated output current		
	Over voltage protection	30 - 34 V	59 - 63 V	
	Overheating protection	Protection circuit is in operation when PWM controller's junction temperature is over 135~140°C.		
	Protection of output short	Auto Re-start		
	DC OK Signal	Green LED (ON when output voltage is normal)		
	DC OK Output	Relay output (ON when rated output is over 85%), 250 V AC 1 A max, 30 V DC 1 A max)		
ETC	Dielectric strength	2,700 V AC for 1 min, Detection current = 10 mA, (Input - Output)		
		1,500 V AC for 1 min, Detection current = 10 mA, (Input - FG)		
		500 V AC for 1 min, Detection current = 10 mA, (Output - FG)		
		500 V AC for 1 min, Detection current = 10 mA, (Output - DC OK)		
Insulation resistance	50 MΩ min. (Input - Output, FG), (Output - FG, DC OK)			
Environment	Ambient temperature	- 25 ~ +70 °C (Refer to the derating curve of output load)		
	Ambient humidity	20 ~ 90 % RH (With no condensation)		
	Storage temperature	- 40 ~ +85 °C (With no condensation)		
	Vibration resistance	10 - 55 Hz, peak amplitude 0.375 mm, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)		
	Shock resistance	150 %, 3 times for each of 6 directions (State of packing)		
	Weight	682 g	680 g	

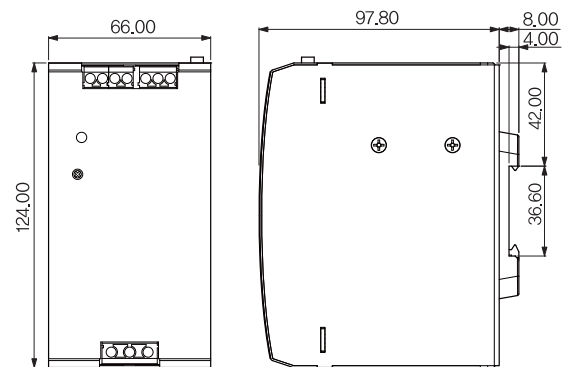
※ Auto-select input selects input voltage automatically without input output 100-120 V AC or 200 - 240 V AC.

### » Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②	-V OUT	- Output terminal
③	COM	DC OK Relay output
④	NC	
⑤	NO	
⑥	⊕	FG
⑦	AC (N)	AC Input terminal
⑧	AC (L)	
⑨	V-ADJ	Output voltage variable volume
⑩	DC OK	Output indication LED

### » Dimension (Unit : mm)



※ Terminal ① and ② are connected inside the device  
Terminal ③ and ④ are connected inside the device



# 240 Watt

( 12 V, 24 V, 48 V DC)

## DPS series

### » Specification

Model		DPS-240S-12	DPS-240S-24	DPS-240S-48	
Output	Rated output voltage	12 V	24 V	48 V	
	Rated output current	18 A	10 A	5 A	
	Rated power output	216 W	240 W		
	Peak current	21 A	12 A	6 A	
	Circuit voltage fluctuation rate	±0.5 %	±0.5 %	±0.5 %	
	Load voltage fluctuation rate	±1 %	±1 %	±1 %	
	Ripple	120 mV max	150 mV max	240 mV max	
	Ambient temperature fluctuation	±1 %	±1 %	±1 %	
	Running time	700 ms max (110 V AC, lo=100 %)			
	Remaining time	30 ms min (110 V AC, lo=100 %)			
	Voltage fluctuation range	11.2 - 13.7 V	22.6 - 27.6 V	45.2 - 50.1 V	
	Voltage setting range	±1 % max (Rated output voltage)			
Input	Input voltage	100 - 120 V AC / 200 - 240 V AC ※ Auto-select input			
	Input frequency	50 - 60 Hz (47 - 63 Hz)			
	Current (A)	110 V AC	4.5	4.5	4.5
		220 V AC	2.4	2.4	2.4
	Efficiency	220 V AC	90 %	92 %	93 %
	Inrush current	110 V AC	20 A Typ. (Ta=25 °C, lo=100 % at Cold start)		
		220 V AC	40 A Typ. (Ta=25 °C, lo=100 % at Cold start)		
Leakage current	110 V AC	0.35 mA max			
	220 V AC	0.75 mA max			
Protection function	Over current protection	Protective function performed within 110 ~ 200 % of the rated output current			
	Over voltage protection	16 - 18 V	28.5 - 33 V	56 - 59 V	
	Overheating protection	Protection circuit is in operation when PWM controller's junction temperature is over 135~140°C.			
	Protection of output short	Auto Re-start			
	DC OK Signal	Green LED (ON when output voltage is normal)			
ETC	Dielectric strength	2,700 V AC for 1 min, Detection current = 10 mA, (Input - Output)			
		1,500 V AC for 1 min, Detection current = 10 mA, (Input - FG)			
		500 V AC for 1 min, Detection current = 10 mA, (Output - FG)			
		500 V AC for 1 min, Detection current = 10 mA, (Output - DC OK)			
	Insulation resistance	50 MΩ min. (Input - Output, FG), (Output - FG, DC OK)			
Environment	Ambient temperature	- 25 ~ +70 °C (Refer to the derating curve of output load)			
	Ambient humidity	20 ~ 90 % RH (With no condensation)			
	Storage temperature	- 40 ~ +85 °C (With no condensation)			
	Vibration resistance	10 - 55 Hz, peak amplitude 0.375 mm, 2 hours for each of 3 directions (DIN Rail is installed without applying voltage)			
	Shock resistance	150 %, 3 times for each of 6 directions (State of packing)			
Weight	896 g	892 g	890 g		

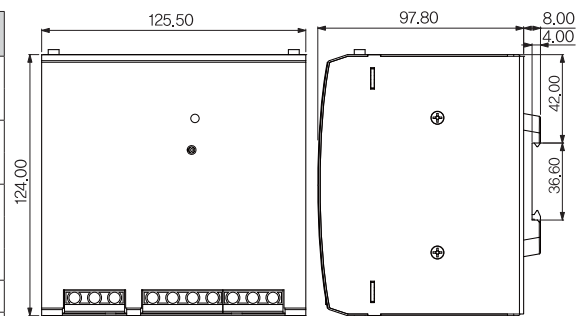
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### » Connection diagram



Terminal number	Terminal name	Description
①	+V OUT	+ Output terminal
②		
③	-V OUT	- Output terminal
④		
⑤	COM	DC OK Relay output
⑥	NC	
⑦	NO	FG
⑧	⊥	
⑨	AC [L]	AC Input terminal
⑩	AC [N]	
⑪	V-ADJ	Output voltage variable volume
⑫	DC OK	Output indication LED

### » Dimension (Unit : mm)



※ Terminal ① and ② are connected inside the device  
Terminal ③ and ④ are connected inside the device