



# APS-30-24

# Datasheet

Aiming to create better and safer working environments and life experiences through the products we deliver.



AVCOMM Technologies, Inc

[www.avcomm.us](http://www.avcomm.us)

Email: [info@avcomm.us](mailto:info@avcomm.us)

Phone: (713) 933-4534

Address: 333 West Loop North, Suite 460  
Houston, TX 77024  
United States

## 30W DIN-Rail Switching Power Supply

### APS-30-24

is an environment friendly power supply for standard DIN-rail mounting with feature of cost-effective and energy efficient. The products offer a high level of stability and immunity to noise, compliant with international IEC62368 standards for EMC and safety specifications meet IEC/EN61000-4, CISPR32, EN55032, UL62368, IEC62368 and EN62368. These lightweight power supply also have an extremely compact design for space saving and are ideal for applications such as industrial control equipment machinery and all kinds of applications in harsh environment.



CB Report



### Features & Benefits

- Wide input voltage range: 85 ~ 264 VAC /120 ~ 370 VDC
- Accepts AC or DC input (dual-use of same terminal)
- Operating temperature: -40 °C to +70 °C
- High I/O isolation test voltage up to 4000VAC
- Industrial product technology design
- Over-voltage class III (Designed to meet EN61558-1 safety standards)
- Low standby power consumption, high efficiency
- Low ripple & noise
- Output short circuit, over-current, over-voltage protection
- Withstand 300VAC surge input for 5s
- DIN rail TS35X7.5/ TS35X15 mountable



### Ordering Information

Part No.	Output power (W)	Nominal Output Voltage & Current(Vo/Io)	Output Voltage Adjustable Range ADJ*	Efficiency @230VAC (Typ.)	Max. Capacitive Load	Certification
APS-30-24	36	24 V/1.5 A	21.6 V-29.0 V	88%	1400 µF	UL/EN/IEC

\* The actual adjustment may exceed the listed values, care shall be taken to ensure the output voltage and power within the maximum value that listed above.

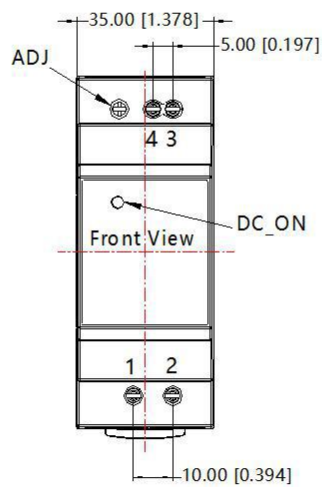
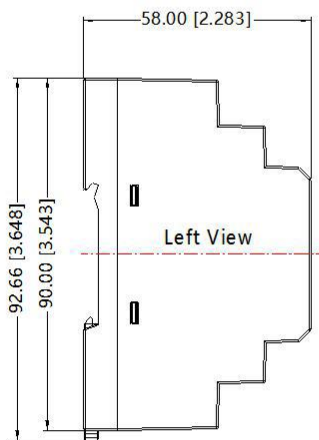
## Specifications

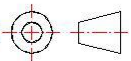
Input Specifications					
Item	Operating condition		Min.	Typ.	Max.
Input Voltage Range	AC input		85 V	-	264 V
	DC input		120 V	-	370 V
Input Frequency			47 Hz	-	63 Hz
Input Current	115VAC		-	-	0.9 A
	230VAC		-	-	0.5 A
Inrush Current	115VAC		-	25 A	--
	230VAC		-	45 A	--
Leakage Current	264VAC		0.25 mA RMS max.		
Hot Plug			Unavailable		
Output Specifications					
Item	Operating condition		Min.	Typ.	Max.
Output Voltage Accuracy	0% - 100%load		-	±2%	
Line Regulation	Rated load		-	±0.5%	
Load Regulation	230VAC		-	±1.5%	
Output Ripple & Noise	20MHz bandwidth (peak-to-peak value)	5V	-	-	80 mV
		12V	-	-	120 mV
		15V	-	-	120 mV
		24V	-	-	150 mV
		48V	-	-	240 mV
Temperature Coefficient				±0.02%/°C	
Short Circuit Protection			Hiccup, continuous, self-recovery		
Over-current Protection			≥120 % Io, self-recovery		
Over-voltage Protection	5V output		≤7.5V Output voltage clamp or hiccup		
	12V output		≤16V Output voltage clamp or hiccup		
	15V output		≤20V Output voltage clamp or hiccup		
	24V output		≤36V Output voltage clamp or hiccup		
	48V output		≤60V Output voltage clamp or hiccup		
Minimum Load			0%	-	-
Start-up Time			-	-	3 s
Hold-up Time	115VAC		-	12ms	-
	230VAC		-	60ms	-

## Specifications

General Specifications						
Item		Operating condition	Min.	Typ.	Max.	
<b>Isolation</b>	<b>Input - output</b>	Electric Strength Test for 1min. (leakage current < 5 mA)	4000 VAC	-	-	
<b>Operating Temperature</b>			-40 °C	-	+70 °C	
<b>Storage Temperature</b>			-40 °C	-	+85 °C	
<b>Storage Humidity</b>			-	-	95%RH	
<b>Operating Altitude</b>			-	-	2000 m	
<b>Switching Frequency</b>			-	65 kHz	-	
<b>Power Derating</b>		-40 °C to -30 °C	5V/48V output	3.0%/°C	-	-
			12V/15V output	7.0%/°C	-	-
			24V output	5.0%/°C	-	-
		+50 °C to +70 °C		2.5%/°C	-	-
		85 VAC – 100 VAC		1.0%/VAC	-	-
<b>Safety Standard</b>			UL/IEC62368-1, IS13252 (Part1) safety approved & EN62368-1, BS EN 62368-1 (Report); Design refer to EN61558-1			
<b>Safety Class</b>			CLASS II			
<b>MTBF</b>		MIL-HDBK-217F@25°C	> 300,000 h			
Mechanical Specifications						
<b>Case Material</b>		Plastic, heat-resistant (UL94V-0)				
<b>Package Dimensions</b>		92.66 mm x 35.00 mm x 58.00 mm				
<b>Weight</b>		115 g (Typ.)				
<b>Cooling method</b>		Free air convection				
Electromagnetic Compatibility (EMC)						
<b>Emissions</b>	CE	CISPR32/EN55032	CLASS B			
	RE	CISPR32/EN55032	CLASS B			
<b>Immunity</b>	ESD	IEC/EN 61000-4-2	Contact ±6KV/ Air ±8KV	Perf. Criteria A		
	RS	IEC/EN 61000-4-3	10V/m	perf. Criteria A		
	EFT	IEC/EN 61000-4-4	±2KV	perf. Criteria A		
	Surge	IEC/EN 61000-4-5	line to line ±2KV	perf. Criteria A		
	CS	IEC/EN 61000-4-6	10Vr.m.s	perf. Criteria A		
	Voltage dips, short interruptions and voltage variations immunity		IEC/EN 61000-4-11	0%, 70%	perf. Criteria A	

## Installation dimensions



THIRD ANGLE PROJECTION 

Pin-Out	
Pin	APS-30-24
1	AC(N)
2	AC(L)
3	-Vo
4	+Vo

Note:  
 Unit: mm[inch]  
 ADJ: adjustable resistance to change output voltage  
 Wire range: 24-12 AWG  
 Tightening torque: Max 0.4 N·m  
 Mounting rail: TS35  
 General tolerances:  $\pm 1.00[\pm 0.039]$