

# SWITCHING POWER SUPPLY

**5 Watts** Series Switching Power

Wall-mount Switching Power-USB Output (FV-012SP)

SAA,CE

*First  
Victory*

First Victory Industrial

## Product Feature:

- Universal input voltage
- Wall-mount type
- Constant output voltage
- Light, and compact design
- Extra safe design, all with their respective safety approvals
- High efficiency circuitry that generates little heat and Does not need heat sinking
- Ultra low no-load/standby power consumption, meeting EC 2005 green power requirements
- Supper power supply, fixed frequency chip circuit Ensures stable, long-lasting output required by today's mobile electronics, such as mobile phones, PDAs, Digital cameras, CD/MP3/MP4/PMP Players, GPRS, and much more
- Built-in EMI filter

## Protection:

- Short circuit protection
- Over voltage protection
- Over current protection
- Thermal shutdown capability

## Reliability:

- Burn-in: 95-100% full load,  $40 \pm 5^{\circ}\text{C}$ , 4Hrs min.
- Leakage Current: 0.25mA max, at 254Vac
- Withstanding Voltage: (between primary & secondary) 3000Vac 1 minute 10mA max
- MTBF: meet MIL-HDBK-217F  
Over 50K hours, full load,  $25^{\circ}\text{C}$



## Safety Approvals:

- AS/NZS 60950:2000
- CE-LVD

## Emissions:

- EN55022 Class B
- AS/NZS 3548, AS/NZS 4251.1 Class B

## Immunity:

- EN55024/A1:2001
- Electrostatic discharger: 61000-4-2
- Radiated electromagnetic fields: 61000-4-3
- Fast transients (burst): 61000-4-4
- Surge transients: 61000-4-5
- Conducted disturbance: 61000-4-6
- Voltage dips, interruptions & variations: 61000-4-11

## Electrical Specifications: (Absolute Maximum Rating)

Description	Symbol	Min	Typ	Max	Units	Comment
<b>Input</b>						
Voltage	$V_{in}$	90	120/240	264	$V_{AC}$	2 Wire no Protective Ground
Frequency	$F_{LINE}$	47	50/60	63	Hz	
No-load input power (230Vac)	P			0.3	W	
Efficiency	$\eta$		65		%	
Inrush Current(240Vac)	I		25		A	Cold $25^{\circ}\text{C}$
<b>Environmental</b>						
Operating Temperature	T	0	/	40	$^{\circ}\text{C}$	Free convection, Sea level
Non-operating Temperature	T	-20	/	80	$^{\circ}\text{C}$	Free convection, Sea level
Operating humidity	T	10	/	90	%RH	Non condensing
Non-operating Humidity	T	10	/	90	%RH	Non condensing

**First Victory Industrial Company Limited**

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**ADD:** Building No.23, 25<sup>th</sup> district, Baoming Road, Gongming town, Baoan county, Shenzhen, China

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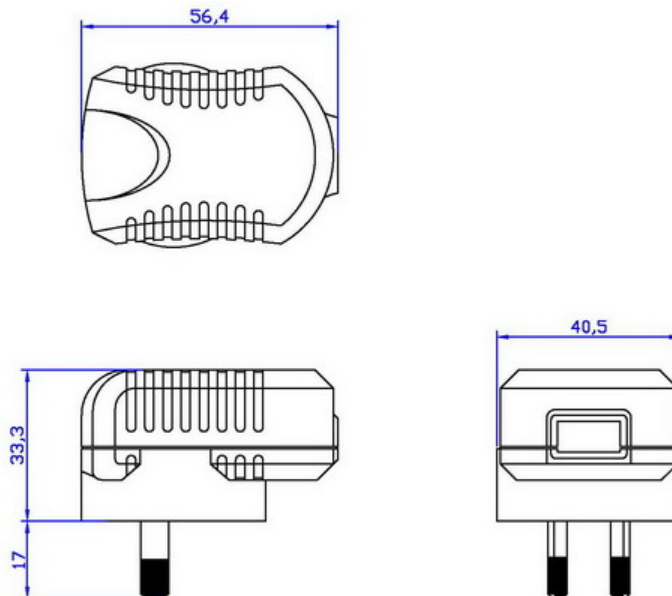
## Typical model list:

INPUT CONDITION		DC OUTPUT VOLTAGE	DC OUTPUT CURRENT	OUTPUT VOLTAGE PRECISION	RIPPLE & NOISES	REGULATION		MAXIMUM OUTPUT POWER
						LINE	LOAD	
Input voltage: 90-264Vac Frequency: 47-63Hz Input current: 0.15A	1	21-24V	0-0.24A	5%	150mV	±1%	±5%	5W
	2	16-20V	0-0.31A	5%	150mV	±1%	±5%	5W
	3	10-15V	0-0.5A	5%	100mV	±1%	±5%	5W
	4	9.4-9.9V	0-0.53A	5%	100mV	±1%	±5%	5W
	5	8.8-9.3V	0-0.57A	5%	80mV	±1%	±5%	5W
	6	8.2-8.7V	0-0.61A	5%	80mV	±1%	±5%	5W
	7	7.6-8.1V	0-0.66A	5%	70mV	±1%	±5%	5W
	8	7.0-7.5V	0-0.71A	5%	70mV	±1%	±5%	5W
	9	6.4-6.9V	0-0.78A	5%	60mV	±1%	±5%	5W
	10	5.8-6.3V	0-0.86A	5%	60mV	±1%	±5%	5W
	11	5.2-5.7V	0-0.96A	5%	60mV	±1%	±5%	5W
	12	4.6-5.1V	0-1.0A	5%	50mV	±1%	±5%	5W
	13	4.0-4.5V	0-1.0A	5%	50mV	±1%	±5%	4.5W
	14	3.4-3.9V	0-1.0A	5%	50mV	±1%	±5%	3.9W
	15	2.8-3.3V	0-1.0A	5%	50mV	±1%	±5%	3.3W

**REMARK:**(Ripple and noise)1.Measurements shall be made with an oscilloscope with 20MHz bandwidth.

2.Outputs shall be bypassed at the connector with a 0.1uF ceramic dick capacitor and a 10uF electrolytic capacitor to simulate system loading.

## Mechanical Specifications:



SAA CE Rohs

Weight:62g



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