



### Features

- Meet Efficiency Level VI
- Operation up to 5, 000 meters
- Full Range AC Input from 90 to 264 Vac
- IEC320-C6 AC Inlet
- Single regulated output from 12/19/24 Vdc Output
- Output Power: 120W and 150W
- High efficiency and reliability
- Class I Power Adapter
- OVP, OCP, Short circuit and thermal protection
- UL/cUL, FCC, TUV, EMC safety approvals
- Meet NRCAN, COC Tier 1, GEMS, CONUEE efficiency requirements
- Meet KC, CCC, RCM, BSMI, PSB, BIS, CU, PSE, NOM safety requirements
- 100% burn-in/Hi-Pot/ATE
- Operation in tropical climate environment
- Custom designs available



### Description

The SPI FSP120/150-AxBN2 series are highly reliable AC-DC switching power supplies with output power from 120W to 150W. All models of adapters provide different output voltages 12VDC, 19VDC, and 24VDC with optional DC plug that fit into the demands for various types of consumer, commercial, and industrial electronic devices. They are enclosed in a 94V-0 rated polycarbonate case with an IEC320-C6 inlet to mate with various AC power cords for world-wide use. All models meet FCC Part 15 class B, IC ICES-003, and EMC emission limitations, and comply with Department of Energy (DOE) and Energy-related Products (ErP) standards.

### Applications

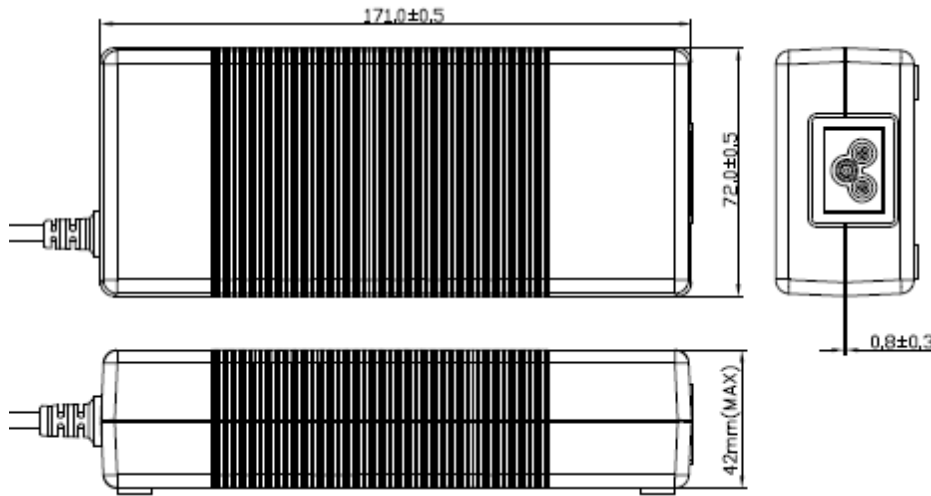
- Desktop/All-in-One/Notebook PCs
- LCD/LED Monitors
- POS systems
- Office electronic devices
- Telecommunication devices
- Test measurement equipment
- Industrial equipment



### Specifications:

	Model	FSP120-AHBN2	FSP150-AHBN2	FSP150-ABBN2	FSP150-AABN2
Output	Rated Voltage	12V	12V	19V	24V
	Current	0 ~ 10A	0 ~ 12.5A	0 ~ 7.89A	0 ~ 6.25A
	Watts	120W	150W	150W	150W
	Voltage Regulation	±5%			
	Overshoot	±10%			
	Dynamic Load Change	±10%			
	Ripple & Noise (Max.)	500mVp-p			
	Turn on Time (Max.)	3Sec			
	Rise Time (Max.)	50ms			
	Hold up Time (Min.)	10ms			
	Efficiency (Typical)	89% DOE VI and COC tier 2	88% ~ 90% DOE VI and COC tier 1	88% ~ 89% DOE VI and COC tier 1	90% ~ 91% DOE VI and COC tier 1
Input	Voltage Range	90 ~ 264Vac			
	Frequency Range	47 ~ 63Hz(±1Hz)			
	Current (Max.)	2A	2A	2A	2A
	Inrush Current (cold start, full load, 25°C)	64.5A @100Vac 121A@240Vac	72.5A@110Vac 174A@240Vac	58.5A@110Vac 94A @240Vac	67A@110Vac 154A @240Vac
	Leakage Current (Max.)	0.25mA at 264VAC/50Hz			
	No Load Power Consumption	015W	0.21W		
Protection	Short Circuit Protection	output shut down and auto-recovery after Fault condition removed			
	Over Current Protection	output shut down and auto-recovery after Fault condition removed			
	Over Voltage Protection	output shut down at 160% of voltage and recovery after AC reset			
	Over Temperature Protection	output shut down at abnormal temperature and recovery after AC reset			
Safety & Compliance	Safety Approvals	CB,UL/cUL, TUV			
	EMI/EMC	FCC Part 15 Class B, EMC			
	RoHS	2011/65/EU			
	Hi Pot	Input to output 1.5KV for 1 minute			
	Insulation Resistance	Input to Output at 500Vdc ≥20MΩ			
Environment	Operating Temperature/ Humidity	0~40°C/20~80%			
	Storage Temperature/ Humidity	-20~80°C/10~90%			
	Vibration	(1) Non-operating, 0.01g2/Hz at 5Hz, slopping to 0.02g2/Hz at 20Hz, And maintain 0.02g2/Hz from 20Hz ~ 500Hz (2) PSD=3.13grms, 15 minutes/axis (3) Vibration duration:15minutes (4) Vibration waveform: Random (5) Force Direction X,Y,Z			
Other	Dimension ((L*W*H)	171 x 72 x 42 mm			
	Adapter Weight (Typical)	800g			
	MTBF	Above 500K hours, Telcordia SR-332 (25°C)			
Note	Contact SPI for further information				

### Mechanical Drawing (mm)



### Optional Output DC Plugs

Profile & Dimension	Pinouts	Description	Suitable for SPI Models	Suggested Mating Connector
	1: -V    2: -V 3: -V    4: +V 5: +V    6: +V	6-pin connector Molex receptacle housing 39-01-2060 with female terminal #5556 series or equivalent	FSP120-AHBN2 FSP150-AHBN2 FSP150-ABBN2 FSP150-AABN2	Molex plug housing 39-01-2066 with male terminal #5558 series or equivalent
	1: -V    2: -V 3: -V    4: +V 5: +V    6: +V	6-pin connector Molex receptacle housing 39-01-2065 with female terminal #5556 series or equivalent	FSP120-AHBN2 FSP150-AHBN2 FSP150-ABBN2 FSP150-AABN2	Molex plug housing 39-01-2066 with male terminal #5558 series or equivalent
	1: +V    2: +V 3: -V    4: -V Shell: -V & AC GND	Female 4-pin plug without lock (molding type) Singatron 3MP-3432 or equivalent	FSP120-AHBN2 FSP150-AHBN2 FSP150-ABBN2 FSP150-AABN2	4-pin connector Singatron 2MJ3002, 2MJ-3432, or equivalent
	1: +V    2: +V 3: -V    4: -V Shell: -V & AC GND	Male 4-pin plug without lock (molding type)	FSP120-AHBN2 FSP150-AHBN2 FSP150-ABBN2 FSP150-AABN2	4-pin socket Kycon P/N: KPJX-4S-S or equivalent



## FSP120/150-AxBN2 Series AC-DC POWER SUPPLY

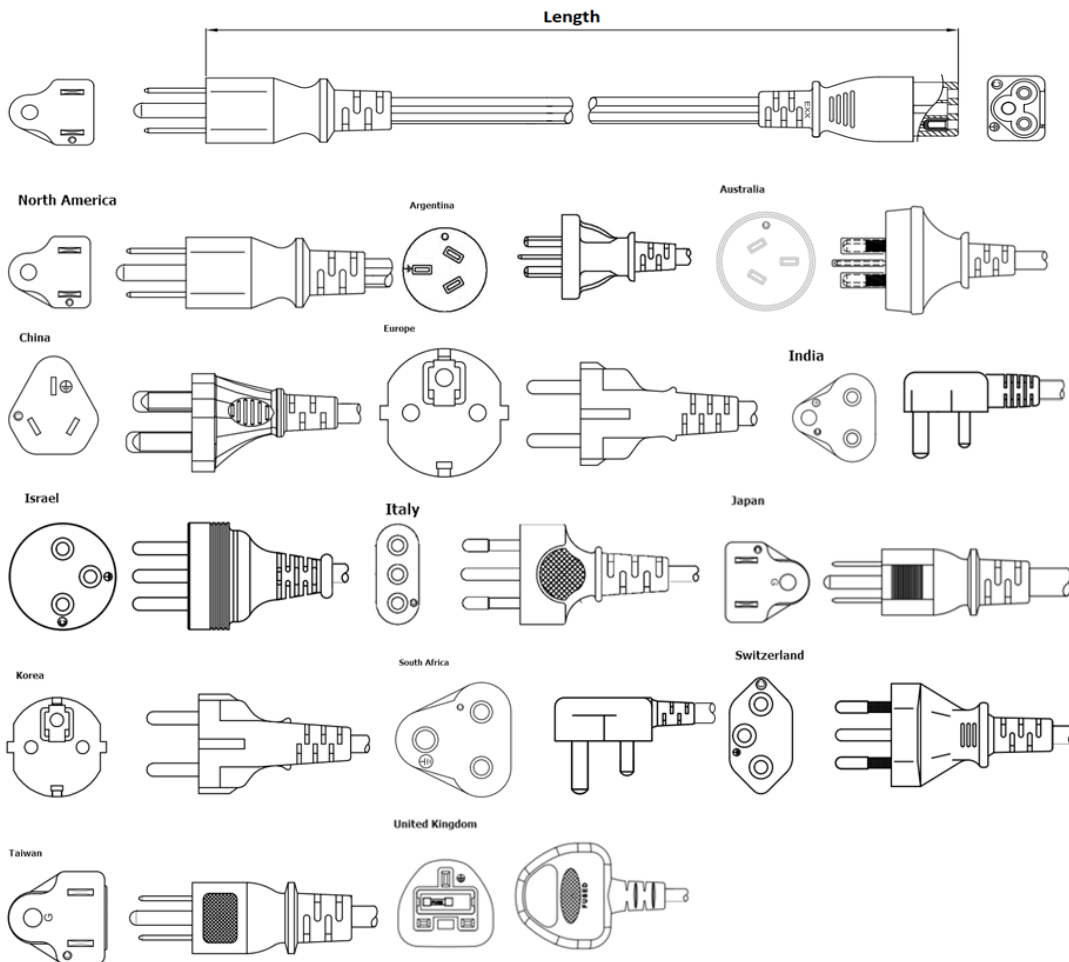
	<p>1: +V    2: +V 3: -V    4: -V Shell: -V &amp; AC GND</p>	<p>Male 4-pin plug with lock (molding type)</p>	<p>FSP120-AHBN2 FSP150-AHBN2 FSP150-ABBN2 FSP150-AABN2</p>	<p>4-pin socket Kycon P/N: KPJX-4S-S or equivalent</p>
	<p>1: -V    2: +V</p>	<p>2-pin receptacle housing Molex 39-01-3025 with female terminal #5556 series or equivalent</p>	<p>FSP150-ABBN2 FSP150-AABN2</p>	<p>Molex plug housing 39-01-2021 with male terminal #5558 series or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel female connector (Fork &amp; Groove type)</p>	<p>FSP120-AHBN2 FSP150-ABBN2 FSP150-AABN2</p>	<p>Switchcraft, Type: RA712 or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel female connector (Fork &amp; Groove type)</p>	<p>FSP120-AHBN2 FSP150-ABBN2 FSP150-AABN2</p>	<p>Switchcraft, Type: RA722 or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel right angle female connector (Fork &amp; Groove type)</p>	<p>FSP120-AHBN2 FSP150-ABBN2 FSP150-AABN2</p>	<p>Switchcraft, Type: RA712 or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel right angle female connector (Fork &amp; Groove type)</p>	<p>FSP120-AHBN2 FSP150-ABBN2 FSP150-AABN2</p>	<p>Barrel right angle female connector (Fork &amp; Groove type)</p>
	<p>Center: +V Sleeve: -V</p>	<p>EIAJ RC-5320A plug type B with internal pin EIAJ-05 plug</p>	<p>FSP120-AHBN2 FSP150-ABBN2 FSP150-AABN2</p>	<p>Lumberg 1613 11 or Lumberg 1614 05 or equivalent</p>

Note: Contact SPI for further information



### Optional AC Power Cords

Country	SPI P/N	Cable Type	Length
North America	PCR-S3US-183D	SPT-2	1830 mm +/- 50
Argentina	PCR-S3AR-183B	H03VV-F	1830 mm +/- 50
Australia	PCR-S3AU-183B	H05VV-F	1830 mm +/- 50
China	PCR-S3CN-183B	RVV 300/300	1830 mm +/- 50
Europe	PCR-S3EU-183B	H05VV-F	1830 mm +/- 50
India	PCR-S3OUK-183B	H05VV-F	1830 mm +/- 50
Israel	PCR-S3IS-183B	H03VV-F	1830 mm +/- 50
Italy	PCR-S3IT-183B	H05VV-F	1830 mm +/- 50
Japan	PCR-S3JP-183A	VCTF	1830 mm +/- 50
Korea	PCR-S3KR-183B	H03VV-F	1830 mm +/- 50
South Africa	PCR-S3SA-183B	H05VV-F	1830 mm +/- 50
Switzerland	PCR-S3SW-183B	H05VV-F	1830 mm +/- 50
Taiwan	PCR-S3TW-183A	VCTF	1830 mm +/- 50
United Kingdom	PCR-S3UK-183B	H05VV-F	1830 mm +/- 50



Note: Contact SPI for further information  
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