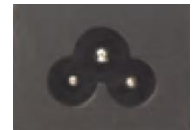




Features

- 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 /48/54Vdc Output
- Output Power: from 96W to 135W
- 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 2, 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

Level VI



Description

The SPI FSP096/135-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, 24VDC, 48VDC, and 54VDC 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

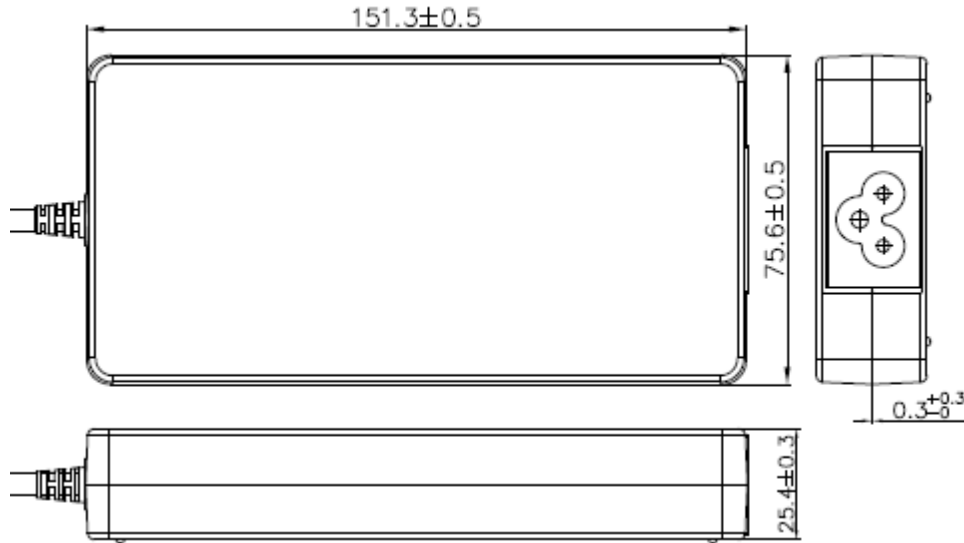
Specifications:



FSP096/135-AxBN2 Series AC-DC POWER SUPPLY

	Model	FSP096-AHBN2	FSP120-ABBN2	FSP120-AABN2	FSP120-AFBN2	FSP120-AWBN2	FSP135-ABBN2	
Output	Rated Voltage	12V	19V	24V	48V	54V	19V	
	Current	0 ~ 8A	0 ~ 6.32A	0 ~ 5.0A	0 ~ 2.5A	0 ~ 2.2A	0 ~ 7.1A	
	Watts	96W	120W	120W	120W	120W	135W	
	Voltage Regulation	±5%						
	Overshoot	±10%						
	Dynamic Load Change	±10%						
	Ripple & Noise (Max.)	350mVp-p						
	Turn on Time (Max.)	3Sec						
	Rise Time (Max.)	50ms						
	Hold up Time (Min.)	10ms						
	Efficiency (Typical)	88% ~ 89% DOE VI & CoC Tier 2	91% DOE VI & CoC Tier 2	90% DOE VI & CoC Tier 2	90% ~ 91% DOE VI & CoC Tier 2	92% DOE VI & CoC Tier 2	91% DOE VI & CoC Tier 2	
Input	Voltage Range	90 ~ 264Vac						
	Frequency Range	47 ~ 63Hz(±1Hz)						
	Current (Max.)	1.8A	1.8A	1.8A	1.8A	1.8A	1.8A	
	Inrush Current (cold start, full load, 25°C)	70A @100Vac 103A@240Vac	38.4A@110Vac 109A@240Vac	40A@110Vac 108A@240Vac	40A@110Vac 113A@240Vac	50.4A@110Vac 121A@240Vac	40A@110Vac 112A@240Vac	
	Leakage Current (Max.)	0.25mA at 264VAC/50Hz						
	No Load Power Consumption	0.15W						
	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, 0.01g ² /Hz at 5Hz, slopping to 0.02g ² /Hz at 20Hz, And maintain 0.02g ² /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)	151.3 x 75.6 x 25.4 mm						
	Adapter Weight (Typical)	450g						
	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	FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2	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	FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2	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	FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2	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)	FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2	4-pin socket Kycon P/N: KPJX-4S-S or equivalent



FSP096/135-AxBN2 Series AC-DC POWER SUPPLY

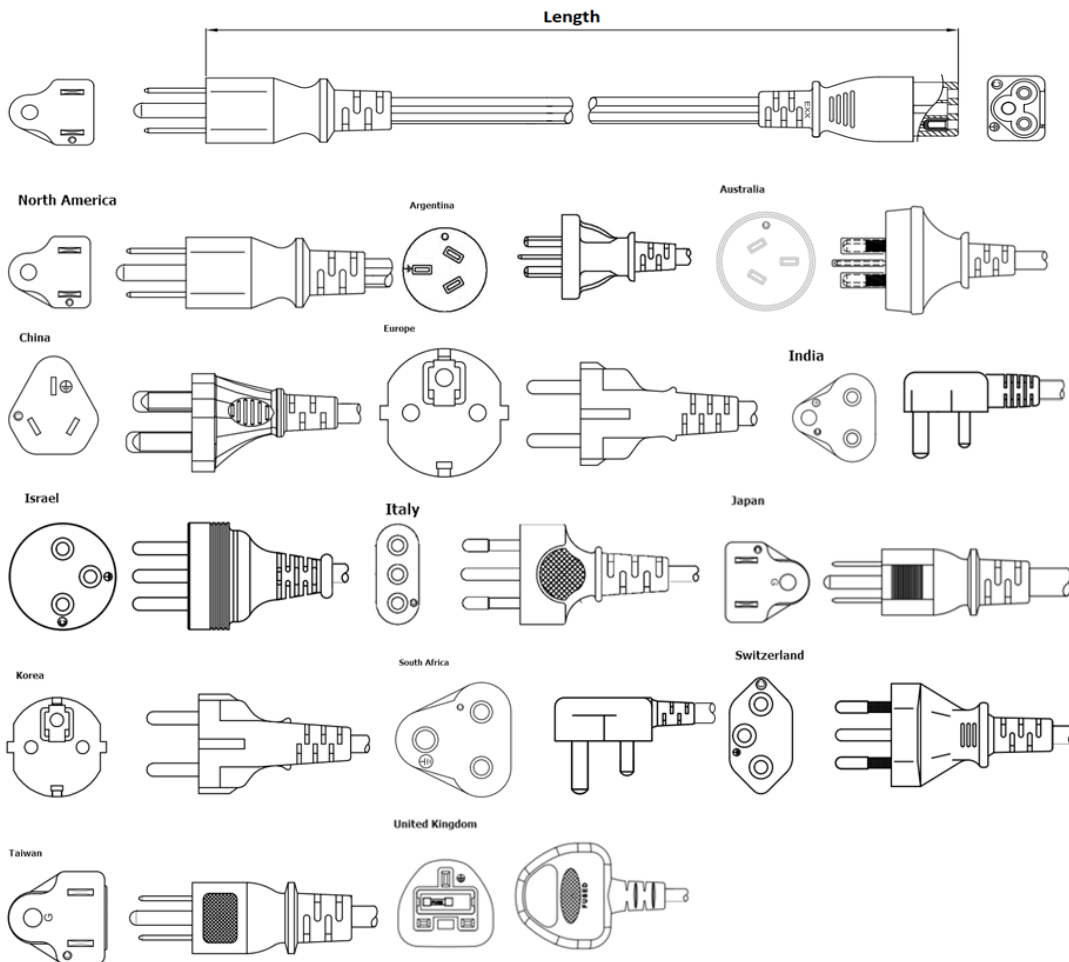
	<p>1: +V 2: +V 3: -V 4: -V Shell: -V & AC GND</p>	<p>Male 4-pin plug with lock (molding type)</p>	<p>FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2</p>	<p>4-pin socket Kycon P/N: KPJX-4S-S or equivalent</p>
	<p>1: -V 2: +V</p>	<p>2-pin receptacle housing Molex 39-01-3025 with female terminal #5556 series or equivalent</p>	<p>FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2</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 & Groove type)</p>	<p>FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2</p>	<p>Switchcraft, Type: RA712 or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel female connector (Fork & Groove type)</p>	<p>FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2</p>	<p>Switchcraft, Type: RA722 or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel right angle female connector (Fork & Groove type)</p>	<p>FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2</p>	<p>Switchcraft, Type: RA712 or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel right angle female connector (Fork & Groove type)</p>	<p>FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2</p>	<p>Barrel right angle female connector (Fork & Groove type)</p>
	<p>Center: +V Sleeve: -V</p>	<p>EIAJ RC-5320A plug type B with internal pin EIAJ-05 plug</p>	<p>FSP096-AHBN2 FSP120-ABBN2 FSP120-AABN2 FSP120-AFBN2 FSP120-AWBN2 FSP135-ABBN2</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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