



Features

- Meet Efficiency Level VI
- Operation up to 5, 000 meters
- Full Range AC Input from 90 to 264 Vac
- IEC320-C14 AC Inlet
- Single regulated output from 12/19/24 Vdc Output
- Output Power: 180W and 220W
- High efficiency and reliability
- Class I Power Adapter
- OVP, OCP, Short circuit and thermal protection
- UL/cUL, FCC, TUV, EMC safety approvals
- Meet NRCAN, ERP 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

Level VI



Description

The SPI FSP180/220-AxAN2 series are highly reliable AC-DC switching power supplies with output power from 180W to 220W. 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-C14 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

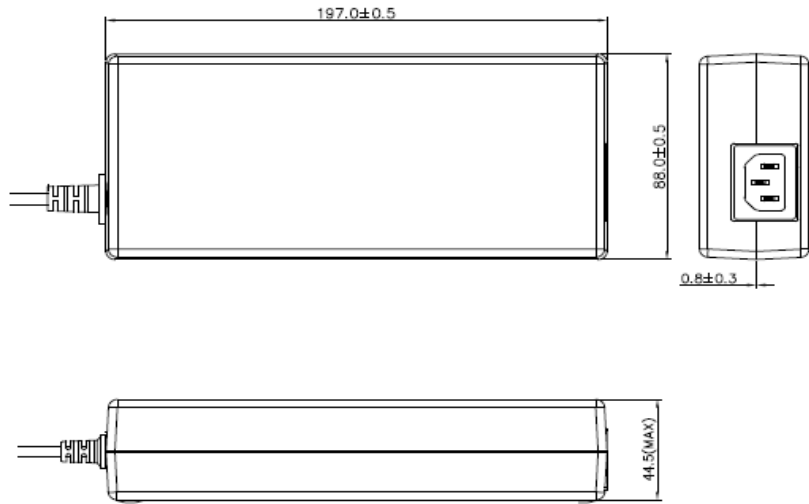


Specifications:

	Model	FSP180-AHAN2	FSP220-ABAN2	FSP220-AAAN2
Output	Rated Voltage	12V	19V	24V
	Current	0 ~ 15A	0 ~ 11.57A	0 ~ 9.16A
	Watts	180W	220W	220W
	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)	90% ~ 91% DOE VI and CoC tier 1	91% ~ 93% DOE VI and CoC tier 1	92% ~ 94% DOE VI and CoC tier 1
Input	Voltage Range	90 ~ 264Vac		
	Frequency Range	47 ~ 63Hz(±1Hz)		
	Current (Max.)	2.5A	3A	3A
	Inrush Current (cold start, full load, 25°C)	60A @100Vac 127A@240Vac	75.5A@110Vac 124A@240Vac	76.5A@110Vac 161A @240Vac
	Leakage Current (Max.)	0.25mA at 264VAC/50Hz		
	No Load Power Consumption	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, 0.01g 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)	197 x 88 x 44.5 mm		
	Adapter Weight (Typical)	1000g		
	MTBF	Above 500K hours, Telcordia SR-332 (25°C)		
Note	Contact SPI for further information			



Mechanical Drawing (mm)



Optional Output DC Plugs

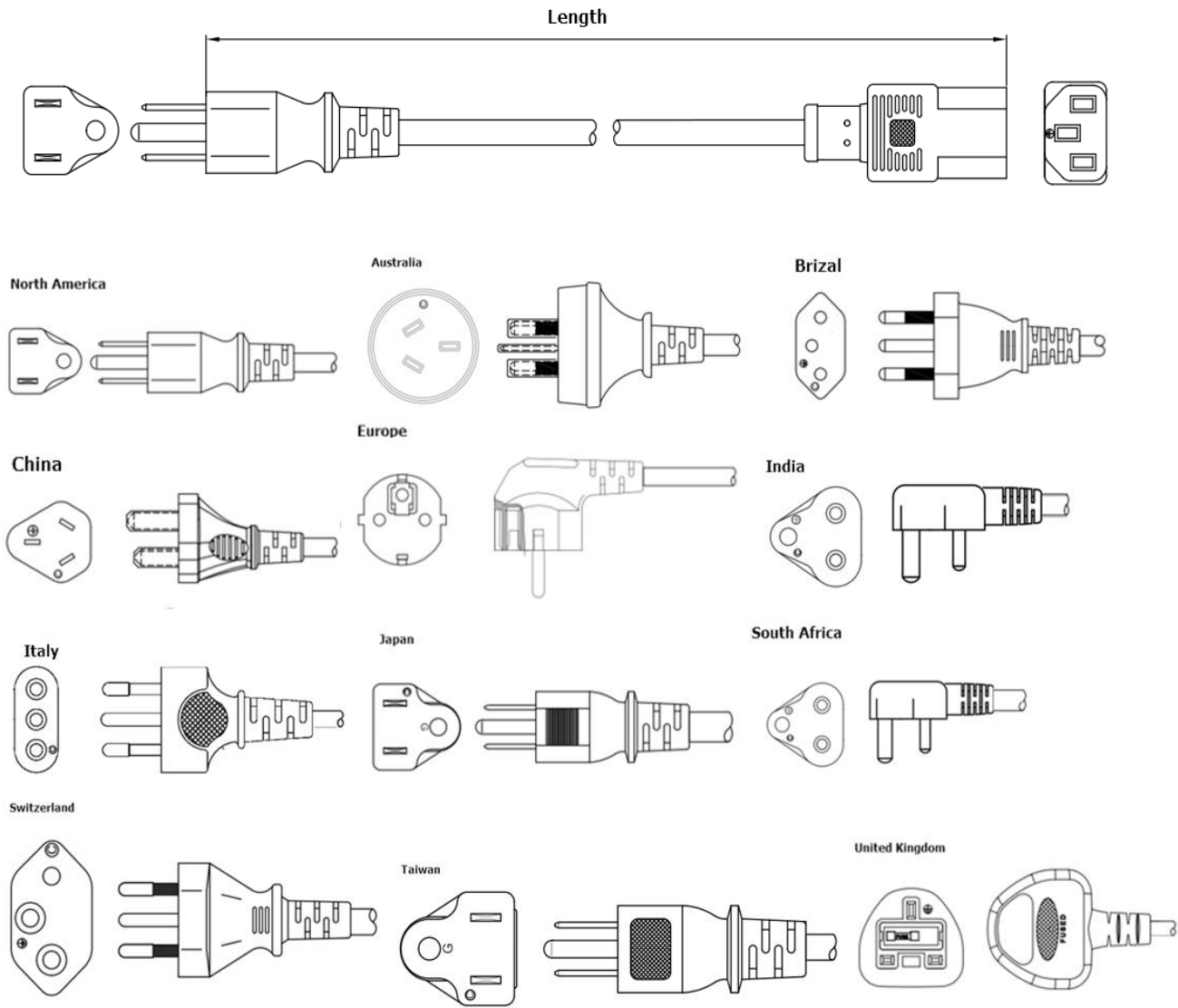
Profile & Dimension	Pinouts	Description	Suitable for SPI Models	Suggested Mating Connector
	1: -V 2: -V 3: -V 4: +V 5: +V 6: +V	6-pin connector Molex receptacle housing 39-01-2060 with female terminal #5556 series or equivalent	FSP180-AHAN2 FSP220-ABAN2 FSP220-AAAN2	Molex plug housing 39-01-2066 with 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	FSP180-AHAN2 FSP220-ABAN2 FSP220-AAAN2	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)	FSP180-AHAN2	4-pin socket Kycon P/N: KPJX-4S-S or equivalent
	1: +V 2: +V 3: -V 4: -V Shell: -V & AC GND	Male 4-pin plug with lock (molding type)	FSP180-AHAN2	4-pin socket Kycon P/N: KPJX-4S-S or equivalent

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Optional AC Power Cords

Country	Cable Type	Length	SPI P/N
North America	SVT	1830 mm +/- 50	PCR-B3US-183C
Australia	H05VV-F	1830 mm +/- 50	PCR-B3AU-183B
Brazil	H05VV-F	1830 mm +/- 50	PCR-B3BR-183B
China	RVV 300/500	1830 mm +/- 50	PCR-B3CN-183B
India	H05VV-F	1830 mm +/- 50	PCR-B3OUK-183B
Italy	H05VV-F	1830 mm +/- 50	PCR-B3IT-183B
Japan	VCTF	1830 mm +/- 50	PCR-B3JP-183A
South Africa	H05VV-F	1830 mm +/- 50	PCR-B3SA-183B
Switzerland	H05VV-F	1830 mm +/- 50	PCR-B3SW-183B
Taiwan	VCTF	1830 mm +/- 50	PCR-B3TW-183A
United Kingdom	H05VV-F	1830 mm +/- 50	PCR-B3UK-183B



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