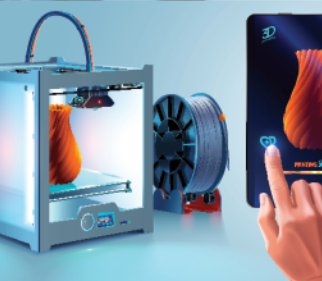




ADAPTER

Semi Slim Type
External Power Supply
USB Power Delivery
PoE Application

POWER
NEVER ENDS



About FSP

FSP Group is the leading power supply manufacturer in the world.

Since established in 1993, the company has been committed to its R&D capability, production capacity and product quality to stand out from the competitive market.

FSP Group provides a great variety of products related to power and electronics technology, such as adapter, open frame, LED Lighting, Medical, LCD TV, Industrial / Desktop computers and Servers to fulfil our OEM / ODM customers' needs. And FSP Group is now making more efforts to develop better environment friendly products, including PV Inverter, UPS and ESS products.

FSP Group's global presence in Taiwan, Brazil, China, Germany, Sweden, France, India, Japan, Korea, Russia, Turkey, UK, and USA has made it easier to provide immediate support. As FSP Group is aiming to create a win-win situation, we treat our customers as friends by providing customized products and excellent service.

For FSP Group, making Power never ends will be our sustainable goal.

Our vision:

To be the global leading provider of green energy solutions, touch people's life, contribute to the better environment.

Our mission:

Providing the best value to customers, employees and shareholders by our innovative service and high quality products.

Adapter Specifications

Model No.		Watts	Case Dimension L x W x H (mm)	Output Rating		Input Socket		Remark
Class-I	Class-II			V	A	Class-I	Class-II	
	FSP012-DHUY3	12	77 x 44.8 x 34	12	1.0		Wall mount	USA AC plug ; No Y capacitance
	FSP012-DHEY3	12	77 x 44.8 x 34	12	1.0		Wall mount	EU AC plug ; No Y capacitance
	FSP012-DHGY3	12	77 x 44.8 x 34	12	1.0		Wall mount	UK AC plug ; No Y capacitance
	FSP012-DHSY3	12	77 x 44.8 x 34	12	1.0		Wall mount	AU AC plug ; No Y capacitance
	FSP012-DHNY3	12	77 x 44.8 x 34	12	1.0		Wall mount	China AC plug ; No Y capacitance
FSP015-DPAN3		15	94 x 38.4 x 29.6	5	3.0	C14		
	FSP018-DHUY3	18	77 x 44.8 x 34	12	1.5		Wall mount	USA AC plug ; No Y capacitance
	FSP018-DHEY3	18	77 x 44.8 x 34	12	1.5		Wall mount	EU AC plug ; No Y capacitance
	FSP018-DHGY3	18	77 x 44.8 x 34	12	1.5		Wall mount	UK AC plug ; No Y capacitance
	FSP018-DHSY3	18	77 x 44.8 x 34	12	1.5		Wall mount	AU AC plug ; No Y capacitance
	FSP018-DHNY3	18	77 x 44.8 x 34	12	1.5		Wall mount	China AC plug ; No Y capacitance
	FSP018-DHUN3	18	77 x 44.8 x 34	12	1.5		Wall mount	USA AC plug
	FSP018-DHEN3	18	77 x 44.8 x 34	12	1.5		Wall mount	EU AC plug
	FSP018-DHGN3	18	77 x 44.8 x 34	12	1.5		Wall mount	UK AC plug
	FSP018-DHSN3	18	77 x 44.8 x 34	12	1.5		Wall mount	AU AC plug
	FSP018-DHNN3	18	77 x 44.8 x 34	12	1.5		Wall mount	China AC plug
FSP020-DPAN3		20	110 x 50 x 32	5	4.0	C14		
	FSP024-DHUN3	24	77 x 44.8 x 34	12	2.0		Wall mount	USA AC plug
	FSP024-DHEN3	24	77 x 44.8 x 34	12	2.0		Wall mount	EU AC plug
	FSP024-DHGN3	24	77 x 44.8 x 34	12	2.0		Wall mount	UK AC plug
	FSP024-DHSN3	24	77 x 44.8 x 34	12	2.0		Wall mount	AU AC plug
	FSP024-DHNN3	24	77 x 44.8 x 34	12	2.0		Wall mount	China AC plug
FSP025-DPAN3		25	110 x 50 x 32	5	5.0	C14		
FSP025-DRAN3		25	94 x 38.4 x 29.6	9	2.8	C14		
FSP025-DHAN3		25	94 x 38.4 x 29.6	12	2.1	C14		
FSP025-DBAN3		25	94 x 38.4 x 29.6	19	1.3	C14		
FSP025-DAAN3		25	94 x 38.4 x 29.6	24	1.0	C14		

Adapter Specifications

Model No.		Watts	Case Dimension L x W x H (mm)	Output Rating		Input Socket		Remark
Class-I	Class-II			V	A	Class-I	Class-II	
FSP030-DHAN3		30	110*50*32	12	2.5	C14		
FSP030-DFAN3		30	110*50*32	48	0.6	C14		
FSP030-DWAN3		30	110*50*32	54	0.6	C14		
FSP036-RHBN3		36	89.8*37.8*27	12	3.0	C6		
FSP036-DHAN3		36	110*50*32	12	3.0	C14		
FSP040-DRAN3		40	110*50*32	9	4.4	C14		
FSP040-RHAN3		40	110*50*32	12	3.3	C14		
FSP040-DHAN3		40	110*50*32	12	3.3	C14		
FSP040-DAAN3		40	110*50*32	24	1.7	C14		
FSP040-DFAN3		40	110*50*32	48	0.8	C14		
FSP040-DWAN3		40	110*50*32	54	0.7	C14		
	FSP040-DHMN3	40	76*43.6*40	12	3.3		Wall mount	Interchangeable EU,USA AC plug
FSP042-RHAN3		42	110*50*32	12	3.5	C14		
FSP045-RBBN3		45	108.3*46.3*30	19	2.4	C6		
	FSP045-RBCN3	45	108.3*46.3*30	19	2.4		C8	
FSP045-RABN3		45	108.3*46.3*30	24	1.9	C6		
	FSP045-RACN3	45	108.3*46.3*30	24	1.9		C8	
	FSP045-D3MR3	45	76*43.6*40	5/9/12/15/20	3/3/3/3/2.25		Wall mount	UPB PD with interchangeable AC plug
FSP045-A1BR		45	66*66*28	5/9/12/15/20	3/3/3/3/2.25	C6		UPB PD with Type C cable
	FSP045-A1UP3	45	50*50*28	5/9/12/15/20	3/3/3/3/2.25		Wall mount	UPB PD with foldable USA AC plug
FSP048-RHAN3		48	110*50*32	12	4.0	C14		
FSP048-DHAN3		48	110*50*32	12	4.0	C14		
FSP050-DHAN3		50	110*62.2*31.5	12	4.2	C14		
FSP050-DAAN3		50	110*62.2*31.5	24	2.1	C14		
FSP050-DFAN3		50	110*50*32	48	1.0	C14		
FSP050-DWAN3		50	110*50*32	54	0.9	C14		
FSP060-DHAN3		60	110*62.2*31.5	12	5.0	C14		
FSP060-DHAB3		60	110*62.2*31.5	12	5.0	C14		Support surge 6KV
FSP060-DAAN3		60	110*62.2*31.5	24	2.5	C14		
FSP060-RAAT3		60	137*59.5*35.3	24	2.5	C14		Peak current
FSP060-RAAK3		60	110*62.2*31.5	24	2.5	C14		Peak current
FSP065-DHAN3		65	110*62.2*31.5	12	5.4	C14		
FSP065-RBBN3		65	108.3*46.3*30	19	3.4	C6		
FSP065-DFAN3		65	110*62.2*31.5	48	1.4	C14		
FSP065-DWAN3		65	110*62.2*31.5	54	1.2	C14		
FSP065-DWAB3		65	110*62.2*31.5	54	1.2	C14		Operating temp. -20~+50°C
FSP065-A1BR3		65	66*66*28	5/9/12/15/20	3/3/3/3/3.25	C6		UPB PD with Type C cable
FSP075-DHAN3		75	160*58*32.3	12	6.3	C14		
FSP084-DHAN3		84	160*58*32.3	12	7.0	C14		
FSP090-DBBN3		90	129*51*30.9	19	4.7	C6		
FSP090-ABAN3		90	140.1*65.1*25.4	19	4.7	C14		1 inch height
FSP090-ABBN3		90	140.1*65.1*25.4	19	4.7	C6		1 inch height
	FSP090-ABCN3	90	140.1*65.1*25.4	19	4.7		C8	1 inch height
FSP090-AAAN3		90	140.1*65.1*25.4	24	3.8	C14		1 inch height
FSP090-AFAN3		90	140.1*65.1*25.4	48	1.9	C14		1 inch height
FSP090-AWAN3		90	140.1*65.1*25.4	54	1.7	C14		1 inch height
FSP090-A1AR3		90	140.1*65.1*25.4	5/9/12/15/20	3/3/3/3/4.5	C14		UPB PD with Type C cable
FSP096-AHAN3		96	151.3*75.6*25.4	12	8.0	C14		1 inch height
FSP100-RAAK3		100	146*75*39	24	4.2	C14		Peak current
FSP100-A1AR3		100	140.1*65.1*25.4	5/9/12/15/20	3/3/3/3/5	C14		UPB PD with Type C cable

Adapter Specifications

Model No.		Watts	Case Dimension L x W x H (mm)	Output Rating		Input Socket		Remark
Class-I	Class-II			V	A	Class-I	Class-II	
FSP120-AHAN3		120	151.3*75.6*25.4	12	10.0	C14		1 inch height
FSP120-ABAN3		120	151.3*75.6*25.4	19	6.3	C14		1 inch height
FSP120-ABBN3		120	151.3*75.6*25.4	19	6.3	C6		1 inch height
FSP120-AAAN3		120	151.3*75.6*25.4	24	5.0	C14		1 inch height
FSP120-AFAN3		120	151.3*75.6*25.4	48	2.5	C14		1 inch height
FSP120-AWAN3		120	151.3*75.6*25.4	54	2.2	C14		1 inch height
FSP130-RAAT3		130	171*72*42	24	5.4	C14		Peak current
FSP150-AHAN3		150	151.3*75.6*25.4	12	12.5	C14		1 inch height
FSP150-ABAN3		150	151.3*75.6*25.4	19	7.9	C14		1 inch height
FSP150-ABBN3		150	151.3*75.6*25.4	19	7.9	C6		1 inch height
FSP150-AAAN3		150	151.3*75.6*25.4	24	6.3	C14		1 inch height
FSP150-AWAN3		150	151.3*75.6*25.4	54	2.8	C14		1 inch height
FSP180-AHAN3		180	177*85.5*32.2	12	15.0	C14		
FSP180-ABAN3		180	151.3*75.6*25.4	19	9.5	C14		1 inch height
FSP180-ABBN3		180	151.3*75.6*25.4	19	9.5	C6		1 inch height
FSP180-AJAN3		180	151.3*75.6*25.4	19.5	9.2	C14		1 inch height
FSP180-AJBN3		180	151.3*75.6*25.4	19.5	9.2	C6		1 inch height
FSP180-AAAN3		180	151.3*75.6*25.4	24	7.5	C14		1 inch height
FSP180-AWAN3		180	151.3*75.6*25.4	54	3.3	C14		1 inch height
FSP192-AHAN3		192	177*85.5*32.2	12	16.0	C14		
FSP230-AJAN3		230	177*85.5*32.2	19.5	11.8	C14		
FSP230-AAAN3		230	177*85.5*32.2	24	9.2	C14		
FSP230-AWAN3		230	177*85.5*32.2	54	4.3	C14		
FSP270-RHAN3		240	204*87.6*41.5	12	22.5	C14		
FSP270-RBAN3		270	204*87.6*41.5	19	14.2	C14		
FSP270-RAAN3		270	204*87.6*41.5	24	11.3	C14		
FSP270-RFAN3		270	204*87.6*41.5	48	5.6	C14		
FSP270-RWAN3		270	204*87.6*41.5	54	5.0	C14		
FSP330-AJAN3		330	200*100*27	19.5	16.9	C14		
FSP330-AAAN3		330	200*100*27	24	13.8	C14		

Product Advantages and Applications



Semi Slim Series

- 90~330w Semi Slim design
 - Efficiency: compliant with DOE Level VI and CoC v5 Tier 2
 - Operational altitude: 5000M
 - Wide output voltage: 12V, 19V, 24V, 48V, 54V
 - Compliant with IEC 62368-1 and IEC 60950-1 certification
-



External Power Supply

- Compliant with IEC 62368-1 and IEC 60950-1 certification
 - Wide range outputs wattage covers from 10 watts to 330 watts
 - Optional output choices: 5V, 9V, 12V, 19V, 24V, 48V, 54V
 - Efficiency: compliant with DOE Level VI and CoC v5 Tier 2
 - Operational altitude: 5000M
 - Flexible modification
-



USB Power Delivery Series

- Offers fast, efficient charging speed
 - Mechanical Type: wall-mount plug and desktop type
 - Wide output wattage: 45 watts, 65 watts, 90 watts, 100 watts
 - Compliant with IEC 62368-1 and IEC 60950-1 certification
 - Efficiency: Compliant with DOE Level VI and CoC v5 Tier 2
 - Ensures compatibility with Type-C charged devices
 - Compact design
-



PoE Application Series

- Support surge 6KV
 - Compliant with IEC 62368-1 and IEC 60950-1 certification
 - Wide range outputs wattage covers from 30 watts to 270 watts
 - Optional output choices: 48V, 54V
 - Efficiency: Compliant with DOE Level VI and CoC v5 Tier 2
 - Operational altitude: 5000M
 - Flexible modification
-



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IPC

Redundant

Flex

PS2 Redundant

POWER
NEVER ENDS



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Our mission:

Providing the best value to customers, employees and shareholders by our innovative service and high quality products.

1U Specifications

Model No.	Wattage	Dimension L x W x H (mm)	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)					
					+3.3V	+5V	+12V1	-12V	+5Vsb	-5V
* FSP300-50UCB	300W	190*100*40.5	Bronze	-	0-12	0-14	0.05-25	0-0.3	0-3	0-0.1
* FSP300-50UDB	300W	190*100*40.5	Gold	-	0-14	0-14	0.05-25	0-0.3	0-3	0-0.1
* FSP400-50UCB	400W	190*100*40.5	Bronze	-	0-14	0-16	0.05-33	0-0.3	0-3	0-0.1
* FSP400-50UDB	400W	190*100*40.5	Gold	-	0-16	0-16	0.05-33	0-0.5	0-3	0-0.1
* FSP500-50UCB	500W	190*100*40.5	Bronze	-	0-14	0-16	0.05-41	0-0.3	0-3	0-0.1
* FSP500-50UDB	500W	190*100*40.5	Gold	-	0-14	0-16	0.05-41	0-0.5	0-3.5	0-0.1
FSP600-50UEB	600W	220*100*40.5	Bronze	-	0.5-25	0.5-25	0.5-50	0.05-0.5	0.1-4.0	
FSP700-50UEB	700W	220*100*40.5	Bronze	-	0.5-25	0.5-25	0.5-58	0.05-0.5	0.1-4.0	
FSP800-50UEB	700W	220*100*40.5	Bronze	-	0.5-25	0.5-25	0.5-66.5	0.05-0.5	0.1-4.0	

Notes: * -5V optional

2U Specifications

Model No.	Wattage	Dimension L x W x H (mm)	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)					
					+3.3V	+5V	+12V1	-12V	+5Vsb	-5V
* FSP300-50WCB	300W	200*100*70	Bronze	-	0-12	0-14	0.05-25	0-0.3	0-3	0-0.1
* FSP400-50WCB	400W	200*100*70	Bronze	-	0-14	0-16	0.05-33	0-0.3	0-3	0-0.1
* FSP400-50WDB	400W	200*100*70	Gold	-	0-16	0-16	0.05-33	0-0.5	0-3	0-0.1
* FSP500-50WCB	500W	200*100*70	Bronze	-	0-14	0-16	0.05-41	0-0.3	0-3	0-0.1
* FSP500-50WDB	500W	200*100*70	Gold	-	0-14	0-16	0.05-41	0-0.5	0-3.5	0-0.1
FSP600-50WEB	600W	240*100*70	Bronze	-	0.5-25	0.5-25	0.5-50	0.05-0.5	0.1-4.0	
FSP700-50WEB	700W	240*100*70	Bronze	-	0.5-25	0.5-25	0.5-58	0.05-0.5	0.1-4.0	
FSP800-50WEB	800W	240*100*70	Bronze	-	0.5-25	0.5-25	0.5-66.5	0.05-0.5	0.1-4.0	

Notes: * -5V optional

ATX Specifications

Model No.	Wattage	Dimension L x W x H (mm)	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)										Remark
					+3.3V	+5V	+12V1	+12V2	+12V3	+12V4	-12V	+5Vsb	-5V	+24V	
FSP250-50AMB	250W	140*150*86	Bronze	-	0-20	0-21	0-20.5				0-0.3	0-2.5			New for ATX 3.0
FSP300-50AMB	300W	140*150*86	Bronze	-	0-20	0-21	0-25				0-0.3	0-2.5			New for ATX 3.0
FSP300-70PFL(SK)	300W	140*150*86	Bronze	-	0-19	0-16	0.03-17	0-17			0-0.5	0-3	0-0.1		
FSP300-70AGGBM	300W	140*150*86	Gold	-	0-19	0-16	0.03-17	0-17			0-0.5	0-3 Peak 3.5	0-0.1		
▲ FSP300-70AGGBM(M)	300W	140*150*86	Gold	-	0-19	0-16	0.03-17	0-17			0-0.5	0-3 Peak 3.5	0-0.1		
FSP350-70PFL(SK)	350W	140*150*86	Bronze	-	0-21	0-16	0.03-17	0-17			0-0.5	0-3	0-0.1		New for ATX 3.0
FSP400-50AMB	400W	140*150*86	Bronze	-	0-20	0-21	0-33				0-0.3	0-2.5			
FSP400-70PFL(SK)	400W	140*150*86	Bronze	-	0-21	0-16	0.03-17	0-17			0-0.5	0-3	0-0.1		
FSP400-80AAB	400W	140*150*86	Bronze	-	0-16	0-16	0.03-18	0-18			0-0.5	0-3	0-0.1	0-8	With 24V output
FSP400-70AGGBM	400W	140*150*86	Gold	-	0-21	0-16	0.03-17	0-17			0-0.5	0-3 Peak 3.5	0-0.1		
▲ FSP400-70AGGBM(M)	400W	140*150*86	Gold	-	0-21	0-16	0.03-17	0-17			0-0.5	0-3 Peak 3.5	0-0.1		
FSP400-70ACB	400W	140*150*86	Platinum	-	0-21	0-16	0.03-17	0-17			0-0.5				
FSP460-70PFL(SK)	460W	140*150*86	Bronze	-	0-22	0-16	0.03-18	0-18			0-0.5	0-3	0-0.1		
FSP500-70PFL(SK)	500W	140*150*86	Bronze	-	0-22	0-16	0.03-18	0-18			0-0.5	0-3	0-0.1		
FSP500-80AAB	500W	140*150*86	Bronze	-	0-18	0-18	0.03-18	0-18			0-0.5	0-3	0-0.1	0-8	With 24V output
FSP500-80AGGBM	500W	140*150*86	Gold	-	0-21	0-20	0.03-16	0-16	0-16		0-0.5	0-3 Peak 3.5	0-0.3		
▲ FSP500-80AGGBM(M)	500W	140*150*86	Gold	-	0-21	0-20	0.03-16	0-16	0-16		0-0.5	0-3 Peak 3.5	0-0.3		
FSP500-70ACB	500W	140*150*86	Platinum	-	0-24	0-20	0.03-18	0-18			0-0.5	0-3	0-0.2		
FSP600-80AAB	600W	140*150*86	Bronze	-	0-20	0-20	0.03-18	0-18			0-0.5	0-3	0-0.1	0-8	With 24V output
FSP600-80PSA(SK)	600W	140*150*86	Bronze	-	0-25	0-25	0.03-16	0-16	0-16	0-16	0-0.5	0-3	0-0.5		
FSP700-80PSA(SK)	700W	140*150*86	Bronze	-	0-24	0-30	0.03-16	0-16	0-16	0-16	0-0.5	0-3	0-0.5		
FSP850-50ADB	850W	190*150*86	Gold	-	0-25	0-25	0.03-70				0-0.5	0-3.5			
FSP1000-50ADB	1000W	190*150*86	Gold	-	0-30	0-30	0.03-83				0-0.8	0-4			
FSP1200-50ADB	1200W	190*150*86	Gold	-	0-30	0-30	0.03-100				0-0.8	0-4			
FSP2000-52AGPBI	2000W	200*150*86	Platinum	-	0-25	0-25	0.03-166.6				0-0.5	0-4			

Notes: ▲Cable management models

DC Specifications

Model No.	Wattage	Dimension L x W x H (mm)	Input	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)				
						+3.3V	+5V	+12V1	-12V	+5Vsb
FSP250-52FGB	250W	150*81.5*40.5	24V	-	-	0-10	0.2-14	0.5-18	0-0.3	0-2.5
FSP250-53FGB	250W	150*81.5*40.5	48V	-	-	0-10	0.2-14	0.5-18	0-0.3	0-2.5
FSP400-57FHB	400W	150*81.5*40.5	48V	-	-	0.1-12	0.1-12	0.2-24.66	0.1-0.3	0.1-2
FSP500-57FHB	500W	150*81.5*40.5	48V	-	-	0.1-12	0.1-12	0.2-33	0.1-0.3	0.1-2
FSP400-57UHB	400W	190*100*40.5	48V	-	-	0.1-12	0.1-12	0.2-24.66	0.1-0.3	0.1-2
FSP500-57UHB	500W	190*100*40.5	48V	-	-	0.1-12	0.1-12	0.2-33	0.1-0.3	0.1-2

FLEX Specifications

Model No.	Wattage	Dimension L x W x H (mm)	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)						
					+3.3V	+5V	+12V1	-12V	+5Vsb	+24V	+53V
FSP100-50FAB	100W	150*81.5*40.5		-	0-8	0-12	0.03-10	0-0.3	0-2		
FSP100-57FAB	100W	150*81.5*40.5		-	0-8	0-12	0.03-10	0-0.3	0-2		
▲ FSP150-50FGNBI(M)	150W	150*81.5*40.5		-	0-8	0-12	0.03-10	0-0.3	0-2		
FSP150-50FGNBI	150W	150*81.5*40.5		-	0-8	0-12	0.03-10	0-0.3	0-2		
FSP150-50FEB	150W	150*81.5*40.5		-	0-10	0-14	0.03-10 Peak 13	0-0.3	0-2.5		
▲ FSP180-50FGNBI(M)	180W	150*81.5*40.5		-	0-8	0-12	0.03-12	0-0.3	0-2		
FSP180-50FGNBI	180W	150*81.5*40.5		-	0-8	0-12	0.03-12	0-0.3	0-2		
FSP180-50FEB	180W	150*81.5*40.5		-	0-10	0-14	0.03-10 Peak 13	0-0.3	0-2.5		
▲ FSP220-50FGGBI(M)	220W	150*81.5*40.5	Bronze	-	0-8	0-12	0.03-14	0-0.3	0-2.5		
FSP220-50FGGBI	220W	150*81.5*40.5	Bronze	-	0-8	0-12	0.03-14	0-0.3	0-2.5		
FSP220-50FEB	220W	150*81.5*40.5	Bronze	-	0-10	0-14	0.03-14 Peak 16	0-0.3	0-2.5		
FSP220-20FGGBD	220W	150*81.5*40.5	Bronze	-			0-6				0-2.8
▲ FSP250-50FGGBI(M)	250W	150*81.5*40.5	Bronze	-	0-12	0-14	0.03-18	0-0.3	0-2.5		
FSP250-50FGGBI	250W	150*81.5*40.5	Bronze	-	0-12	0-14	0.03-18	0-0.3	0-2.5		
FSP250-20FGGBD	250W	150*81.5*40.5	Bronze	-			0-7				0-3.2
FSP280-20FGGBD	280W	150*81.5*40.5	Bronze	-			0-8				0-4.2
◎ FSP300-30FQB	300W	150*81.5*40.5		-			0-25		0-3	0-6	
FSP300-50FCB	300W	150*81.5*40.5	Gold	-	0-14	0-14	0.03-24	0-0.3	0-3		
▲ FSP300-57FCB	300W	150*81.5*40.5	Gold	-	0-14	0-14	0.03-24	0-0.3	0-3		
FSP350-50FCB	350W	150*81.5*40.5	Gold	-	0-14	0-16	0.03-29	0-0.3	0-3		
▲ FSP350-57FCB	350W	150*81.5*40.5	Gold	-	0-14	0-16	0.03-29	0-0.3	0-3		
FSP400-50FDB	400w	150*81.5*40.5	Gold	-	0-14	0-16	0.05-33	0-0.3	0-3		
FSP500-50FDB	500w	150*81.5*40.5	Gold	-	0-14	0-16	0.05-41	0-0.3	0-3		
FSP850-50FGPH3	850W	220*81.5*40.5	Platinum	V1.2	0-20	0-20	0-70.8	0-0.5	0-3		

Notes: ◎New ▲Cable management models

1U Redundant Specifications

Model No.	Wattage	Dimension L x W x H (mm)	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)					
					+3.3V	+5V	+12V1	+12V2	-12V	+5Vsb
FSP250-60RCB	250W	260*106*41.3	Bronze	-	0-19	0-17	0.5-14	0.5-14	0-0.5	0-2
FSP300-60RCB	300W	260*106*41.3	Bronze	-	0-20	0-20	0.5-14	0.5-14	0-0.5	0-2
◎ FSP300-50RFB	300W	190*100*40.5	Gold	V1.2	0-20	0-20	0.1-25		0-0.5	0-2
FSP400-50RDB	400W	260*106*41.3	Bronze	-	0-20	0-20	0.1-33.34		0-0.5	0-2
FSP500-50RDB	500W	260*106*41.3	Bronze	-	0-20	0-20	0.1-41.67		0-0.5	0-2

Notes: ◎New

Mini Redundant Specifications

Model No.	Wattage	Dimension L x W x H (mm)	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)					
					+3.3V	+5V	+12V1	-12V	+5Vsb	-5V
FSP350-60MRB(S)	350W	190*150*84	Gold	V1.2	0-20	0-20	1-29	0-0.5	0-2	0-0.3
FSP500-60MRB(S)	500W	190*150*84	Gold	V1.2	0-20	0-20	1-40	0-0.5	0-3	0-0.3
FSP600-60MRB(S)	600W	190*150*84	Gold	V1.2	0-20	0-20	1-49	0-0.5	0-3	0-0.3

PS2 Redundant specifications

Model No.	Wattage	Dimension L x W x H (mm)	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)				
					+3.3V	+5V	+12V1	-12V	+5Vsb
FSP400-50RAB	400W	190*150*86	Gold	V1.2	0-20	0-20	0-33.34	0-0.5	0-3
FSP500-50RAB	500W	190*150*86	Gold	V1.2	0-20	0-20	0-41.67	0-0.5	0-3
FSP600-50RAB	600W	190*150*86	Gold	V1.2	0-20	0-20	0-50	0-0.5	0-3
FSP700-50RAB	700W	190*150*86	Gold	V1.2	0-20	0-20	0-58.3	0-0.5	0-3
FSP900-50REB	900W	190*150*86	Gold	V1.2	0-20	0-20	0-75	0-0.5	0-3

CRPS Specifications

Model No.	Wattage	Dimension L x W x H (mm)	Input	Fan Reversed	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)			Remark
							+12V	+54V	+12Vsb	
FSP550-20FM	550W	185*73.5*40	AC		Platinum	V1.2	44A		2.1A	
FSP550-29FM	550W	185*73.5*40	AC	V	Platinum	V1.2	44A		2.1A	
FSP550-20FL	550W	185*73.5*40	DC -48V			V1.2	44A		2.1A	
FSP550-29FL	550W	185*73.5*40	DC -48V	V		V1.2	44A		2.1A	
FSP550-20FH	550W	185*73.5*40	HVDC		Platinum	V1.2	44A		2.1A	
FSP800-20FM	800W	185*73.5*40	AC		Platinum	V1.2	65A		2.1A	
FSP800-29FM	800W	185*73.5*40	AC	V	Platinum	V1.2	65A		2.1A	
FSP800-20FH	800W	185*73.5*40	HVDC		Platinum	V1.2	65A		2.1A	
FSP800-20FN	800W	185*73.5*40	AC		Platinum	V1.2	65A		2.1A	NEBS
FSP800-29FN	800W	185*73.5*40	AC	V	Platinum	V1.2	65A		2.1A	NEBS
FSP800-20FL	800W	185*73.5*40	DC -48V			V1.2	65A		2.1A	
FSP800-29FL	800W	185*73.5*40	DC -48V	V		V1.2	65A		2.1A	
FSP1200-20FM	1200W	185*73.5*40	AC		Platinum	V1.2	97A		3A	
FSP1200-29FM	1200W	185*73.5*40	AC	V	Platinum	V1.2	97A		3A	
FSP1200-20FH	1200W	185*73.5*40	HVDC		Platinum	V1.2	97A		3A	
FSP1300-20FM	1300W	185*73.5*40	AC		Platinum	V1.2	105.3A		3A	
FSP1300-29FM	1300W	185*73.5*40	AC	V	Platinum	V1.2	105.3A		3A	
FSP1300-20FH	1300W	185*73.5*40	HVDC		Platinum	V1.2	105.3A		3A	
※ FSP1300-20HM	1300W	185*73.5*40	AC		Titanium	V1.2	105.3A		3A	
FSP1600-20FM	1600W	185*73.5*40	AC		Platinum	V1.2	130.3A		3A	
FSP1600-20FH	1600W	185*73.5*40	HVDC		Platinum	V1.2	130.3A		3A	
※ FSP1600-20HM	1600W	185*73.5*40	AC		Titanium	V1.2	130.3A		3A	
FSP2000-20FM	2000W	185*73.5*40	AC		Platinum	V1.2	163.6A		3A	
FSP2000-20HM	2000W	185*73.5*40	AC		Titanium	V1.2	163.6A		3A	
FSP2400-20FM	2400W	185*73.5*40	AC		Platinum	V1.2	196.7A		3A	
※ FSP2700-20HM	2700W	185*73.5*40	AC		Titanium	V1.2	222A		3A	
FSP3000-20FE	3000W	265*73.5*40	AC		Titanium	V1.2		55.6A	3A	

Notes: ※Coming Soon

CRPS Specifications

Model No.	Wattage	Dimension L x W x H (mm)	80 Plus Efficiency Level	PMBus	Output Voltage [Output Current: Min ~Max (A)] PEAK (A)					Remark
					+3.3V	+5V	+12V	-12V	+5Vsb	
FSP550-50FS	550W	265*76*84	-	V1.2	0-20	0-20	0.5-44	0-0.3	0-4	Set
FSP800-50FS	800W	265*76*84	-	V1.2	0-25	0-25	0.5-65	0-0.3	0-4.5	Set
FSP1200-50FS	1200W	265*76*84	-	V1.2	0-30	0-30	0.5-97	0-0.3	0-5	Set
FSP-FC210E	550 to 1200W	210*76*84	-	V1.2	0-12	0-12	0.5-45.8/65/97	0-0.3	0-5	Universal housing
FSP-FC210	550 to 2400W	210*76*84	-	V1.2	0-12	0-24	0.5-45.8/65/97/105.4/ 130.4/163.6/196.7	0-0.3	0-5	Universal housing
▲ FSP-FC250	550 to 2400W	265*76*84	-	V1.2	0-12	0-24	0.5-45.8/65/97/105.4/ 130.4/163.6/196.7	0-0.3	0-5	Universal housing

Notes: ▲Cable management models

Product Advantages and Applications



Redundant

- CRPS with IEC 62368 Safety certificated
- 80 Plus Titanium & Platinum efficiency
- Support PMBus v1.2
- Fully digital design
- Well working performance at 55°C
- Best solution for data center, telecom server and NAS

Applications: For standard, advanced rack servers (including micro, cloud server, embedded servers...etc.), 5G network and storage system.



Flex

- Easy swap or install with cable management design
- Widely input range: 90 to 264Vac, 24Vdc & 48Vdc
- Standard ATX output plus one 24Vdc for POS or 53Vdc for PoE system
- Total output power from 100W to 500W in one standard size
- Max. 850W with 220mm (L) with PMBus v1.2

Applications: For industry system, DVR/NVR, NAS, digital signage, ATM/Kiosk, firewall and networking systems.



PS2 Redundant

- Easy install in tower or 4U server with standard ATX screw positions
- Total output power from 350W to 900W
- Support PMBus v1.2
- Low acoustic level for office or home environments

Applications: For industry controller, NAS and storage system.

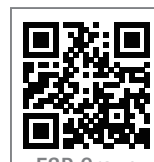


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FSP Group



MEDICAL

PC ATX
Adapter
Open Frame

POWER
NEVER ENDS

About FSP

FSP Group is the leading power supply manufacturer in the world.

Since established in 1993, the company has been committed to its R&D capability, production capacity and product quality to stand out from the competitive market.

FSP Group provides a wide variety of products related to power and electronics technology, such as adapter, open frame, SSL LED Driver, Medical, LCD TV, Industrial / Desktop computers and Servers to fit our OEM / ODM customers' needs. FSP Group is aiming to develop more and better environment friendly products continuously, including PV Inverter, UPS, ESS and battery charger products.

FSP Group's global presence in Taiwan, China, Germany, Sweden, France, India, Japan, Korea, Turkey, UK, and USA has made it easier to provide immediate support. As FSP Group is aiming to create a win-win situation, we treat our customers as friends by providing customized products and excellent service.

For FSP Group, making **Power never ends** will be our sustainable goal.

Our vision:

To be the global leading provider of green energy solutions, touch people's life, contribute to the better environment.

Our mission:

Providing the best value to customers, employees and shareholders by our innovative service and high quality products.

PC ATX Specifications

Form Factor	Max Wattage	Dimension L x W x H (mm)	Model No.	Maximum Load (A)								Safety Certificate
				+3.3V	+5V	+12V1	+12V2	+12V3	-12V	+5Vsb	-5V	
Flex	220	190 x 82 x 41	FSP220-60MPC	9	12	14			0.3	2.5	0.3	UL, TUV, CE
Flex	250	190 x 82 x 41	FSP250-60MPC	12	14	18			0.3	2.5	0.3	UL, TUV, CE
1U	300	190 x 100 x 41	FSP300-70MU	16	18	16	16		0.5	2.5	0.2	UL, VDE, CE
1U	350	190 x 100 x 41	FSP350-70MU	16	18	16	16		0.5	2.5	0.2	UL, VDE, CE
1U	400	220 x 100 x 41	FSP400M-80PA	18	18	16	16	16	0.5	3.0	0.2	UL, TUV, CE
1U	500	220 x 100 x 41	FSP500M-80PA	20	20	16	16	16	0.5	3.0	0.2	UL, TUV, CE
PS2	400	140 x 150 x 86	FSP400M-70PD	21	18	18	18		0.5	3.0	0.2	UL, TUV, CE
PS2	400	140 x 150 x 86	FSP400-70MPE	32	30	18	18		0.8	3.0	0.2	UL, TUV, CE
PS2	500	140 x 150 x 86	FSP500M-80PD	24	20	16	16	16	0.5	3.0	0.2	UL, TUV, CE
PS2	500	140 x 150 x 86	FSP500-70MPE	32	30	18	18		0.8	3.0	0.2	UL, TUV, CE
PS2	600	165 x 150 x 86	FSP600M-70PB	24	30	25	25		0.5	3.0	0.2	UL, TUV, CE
PS2	700	165 x 150 x 86	FSP700M-70PB	24	30	30	30		0.5	3.0	0.2	UL, TUV, CE

Notes: + Input voltage AC 100~240V + 50°C Operation Temperature + Optional -5V output

Wall mount Specifications

Max Wattage	Case Dimension L x W x H (mm)	Model No.			Output Rating		Safety Certificate
		USA	Europe	Interchangeable	V	A	
20	77 x 45 x 34	FSP020M-KPU	FSP020M-KPE	FSP020M-KPM ^{*1}	5	4.00	UL, TUV, CE ^{*2}
27	77 x 45 x 34	FSP027M-KSU	FSP027M-KSE	FSP027M-KSM ^{*1}	10	2.70	UL, TUV, CE ^{*2}
30	77 x 45 x 34	FSP030M-KHU	FSP030M-KHE	FSP030M-KHM ^{*1}	12	2.50	UL, TUV, CE ^{*2}
30	77 x 45 x 34	FSP030M-KDU	FSP030M-KDE	FSP030M-KDM ^{*1}	18	1.67	UL, TUV, CE ^{*2}
30	77 x 45 x 34	FSP030M-KAU	FSP030M-KAE	FSP030M-KAM ^{*1}	24	1.25	UL, TUV, CE ^{*2}

Notes: ^{*1)} Dimension 77 x 45 x 40 mm ^{*2)} UL for USA model, TUV & CE for Europe model

Adapter Specifications

Max Wattage	Case Dimension L x W x H (mm)	Model No.		Output Rating		Input Socket		Safety Certificate
		Class-I	Class-II	V	A	Class-I	Class-II	
25	110 x 50 x 32	FSP025M-DPA		5	5.00	C14		UL, TUV, CE
30	110 x 50 x 32	FSP030M-DHA		12	2.50	C14		UL, TUV, CE
30	110 x 50 x 32	FSP030M-DGA		15	2.00	C14		UL, TUV, CE
30	110 x 50 x 32	FSP030M-DDA		18	1.66	C14		UL, TUV, CE
45	114 x 50 x 34	FSP045M-DHA		12	3.75	C14		TBC
45	114 x 50 x 34	FSP045M-DGA		15	3.00	C14		TBC
45	114 x 50 x 34	FSP045M-DBA		19	2.37	C14		TBC
45	114 x 50 x 34	FSP045M-DAA		24	1.88	C14		TBC
60	129 x 59 x 32	FSP060M-DHB3	FSP060M-DHC3	12	5.00	C6	C8	UL, TUV, CE ^{*3}
60	129 x 59 x 32	FSP060M-DBB3	FSP060M-DBC3	19	3.16	C6	C8	UL, TUV, CE ^{*3}
60	129 x 59 x 32	FSP060M-DAB3	FSP060M-DAC3	24	2.50	C6	C8	UL, TUV, CE ^{*3}
60	129 x 59 x 32	FSP060M-DHA3		12	5.00	C14		UL, TUV, CE ^{*3}
60	129 x 59 x 32	FSP060M-DBA3		19	3.16	C14		UL, TUV, CE ^{*3}
60	129 x 59 x 32	FSP060M-DAA3		24	2.50	C14		UL, TUV, CE ^{*3}
90	140 x 71 x 22	FSP090-RHBM1	FSP090-RHCM1	12	7.50	C6	C8	UL, TUV, CE
90	140 x 71 x 22	FSP090-RDBM1	FSP090-RDCM1	18	5.00	C6	C8	UL, TUV, CE
90	140 x 71 x 22	FSP090-RBBM1	FSP090-RBCM1	19	4.74	C6	C8	UL, TUV, CE
90	140 x 71 x 22	FSP090-RABM1	FSP090-RACM1	24	3.75	C6	C8	UL, TUV, CE
90	145 x 71 x 29	FSP090M-RHA		12	7.50	C14		UL, TUV, CE
90	145 x 71 x 29	FSP090M-RGA		15	6.00	C14		UL, TUV, CE
90	145 x 71 x 29	FSP090M-RBA		19	4.74	C14		UL, TUV, CE
90	145 x 71 x 29	FSP090M-RAA		24	3.75	C14		UL, TUV, CE
132	175 x 90 x 28	FSP132M-KHA	FSP132M-KHC	12	11.00	C14	C8	UL, TUV, CE
150	175 x 90 x 28	FSP150M-KBA	FSP150M-KBC	19	7.90	C14	C8	UL, TUV, CE
150	175 x 90 x 28	FSP150M-KAA	FSP150M-KAC	24	6.25	C14	C8	UL, TUV, CE
220	204 x 88 x 42	FSP250M-KHA	FSP250M-KHD	12	18.34	C14	C18	UL, TUV, CE
250	204 x 88 x 42	FSP250M-KBA	FSP250M-KBD	19	13.16	C14	C18	UL, TUV, CE
250	204 x 88 x 42	FSP250M-KAA	FSP250M-KAD	24	10.42	C14	C18	UL, TUV, CE
250	204 x 88 x 42	FSP250M-KEA	FSP250M-KED	36	6.95	C14	C18	UL, TUV, CE
250	204 x 88 x 42	FSP250M-KFA	FSP250M-KFD	48	5.21	C14	C18	UL, TUV, CE

Notes: ^{*1)} Input voltage AC 100~240V ^{*2)} 40°C Operation Temperature ^{*3)} Please check certificate schedule before design

Openframe Specifications

Max Wattage		Dimension L x W x H (inch)	Model No.	Output Rating				Fan Driver	Form Factor	Safety Certificate	Note
Convection	Forced air			V1	A1	V2	A2				
55		2 x 4 x 1.18"	FSP060-1K00M1	5	11.00			Yes	PCB	UL, TUV, CE	
60		2 x 4 x 1.18"	FSP060-1K20M1	12	5.00			Yes	PCB	UL, TUV, CE	
64		2 x 4 x 1.18"	FSP060-1K30M1	15	4.30			Yes	PCB	UL, TUV, CE	
64		2 x 4 x 1.18"	FSP060-1K40M1	24	2.70			Yes	PCB	UL, TUV, CE	
55		2 x 4 x 1.18"	FSP060-2K30M1	5	8.00	12	3.00	Yes	PCB	UL, TUV, CE	
55		2 x 4 x 1.18"	FSP060-2K50M1	5	8.00	24	1.50	Yes	PCB	UL, TUV, CE	
80	100	2 x 4 x 1.19"	FSP100M-K24-12A	12	8.34			Yes	PCB	UL, TUV, CE	
80	100	2 x 4 x 1.19"	FSP100M-K24-15A	15	6.67			Yes	PCB	UL, TUV, CE	
80	100	2 x 4 x 1.19"	FSP100M-K24-18A	18	5.56			Yes	PCB	UL, TUV, CE	
80	100	2 x 4 x 1.19"	FSP100M-K24-24A	24	4.17			Yes	PCB	UL, TUV, CE	
80	100	2 x 4 x 1.19"	FSP100M-K24-36A	36	2.78			Yes	PCB	UL, TUV, CE	
80	100	2 x 4 x 1.19"	FSP100M-K24-48A	48	2.09			Yes	PCB	UL, TUV, CE	
100	150	2 x 4 x 1.29"	FSP150M-K24-12	12	12.50			Yes	PCB	UL, TUV, CE	
100	150	2 x 4 x 1.29"	FSP150M-K24-18	18	8.34			Yes	PCB	UL, TUV, CE	
100	150	2 x 4 x 1.29"	FSP150M-K24-24	24	6.25			Yes	PCB	UL, TUV, CE	
100	150	2 x 4 x 1.29"	FSP150M-K24-36	36	4.17			Yes	PCB	UL, TUV, CE	
100	150	2 x 4 x 1.29"	FSP150M-K24-48	48	3.13			Yes	PCB	UL, TUV, CE	
150	200	3 x 5 x 1.5"	FSP202-1K20M1	12	16.67			Yes	U-Bracket	UL, TUV, CE	
150	200	3 x 5 x 1.5"	FSP202-1K31M1	18	11.12			Yes	U-Bracket	UL, TUV, CE	
150	200	3 x 5 x 1.5"	FSP202-1K40M1	24	8.34			Yes	U-Bracket	UL, TUV, CE	
150	200	3 x 5 x 1.5"	FSP202-1K70M1	36	5.56			Yes	U-Bracket	UL, TUV, CE	
150	200	3 x 5 x 1.5"	FSP202-1K80M1	48	4.17			Yes	U-Bracket	UL, TUV, CE	
150	260	3 x 5 x 1.28"	FSP260M-P35-A12	12	21.66			No	PCB	UL, TUV, CE ^{*3}	
150	260	3 x 5 x 1.28"	FSP260M-P35-A19	19	13.66			No	PCB	UL, TUV, CE ^{*3}	
150	260	3 x 5 x 1.28"	FSP260M-P35-A24	24	10.80			No	PCB	UL, TUV, CE ^{*3}	
200	300	3 x 6 x 1.38"	FSP300M-K36-12A	12	25.00	+5Vaux	2.0	Yes	PCB	UL, TUV, CE	
200	300	3 x 6 x 1.38"	FSP300M-K36-19A	19	15.80	+5Vaux	2.0	Yes	PCB	UL, TUV, CE	
200	300	3 x 6 x 1.38"	FSP300M-K36-24A	24	12.50	+5Vaux	2.0	Yes	PCB	UL, TUV, CE	
200	300	3 x 6 x 1.38"	FSP300M-K36-36A	36	8.34	+5Vaux	2.0	Yes	PCB	UL, TUV, CE	
200	300	3 x 6 x 1.38"	FSP300M-K36-48A	48	6.25	+5Vaux	2.0	Yes	PCB	UL, TUV, CE	
300	400	4 x 7 x 1.58"	FSP400-1K20M1	12	33.34	+5Vaux	0.1	Yes	U-Bracket	UL, TUV, CE	
300	400	4 x 7 x 1.58"	FSP400-1K31M1	18	22.23	+5Vaux	0.1	Yes	U-Bracket	UL, TUV, CE	
300	400	4 x 7 x 1.58"	FSP400-1K40M1	24	16.67	+5Vaux	0.1	Yes	U-Bracket	UL, TUV, CE	
300	400	4 x 7 x 1.58"	FSP400-1K70M1	36	11.12	+5Vaux	0.1	Yes	U-Bracket	UL, TUV, CE	
300	400	4 x 7 x 1.58"	FSP400-1K80M1	48	8.34	+5Vaux	0.1	Yes	U-Bracket	UL, TUV, CE	
350	450	4 x 7 x 1.7"	FSP500M-K47-12B	12	37.50	+5Vaux	0.5	Yes	U-Bracket	UL, TUV, CE	
400	500	4 x 7 x 1.7"	FSP500M-K47-18B	18	27.78	+5Vaux	0.5	Yes	U-Bracket	UL, TUV, CE	
400	500	4 x 7 x 1.7"	FSP500M-K47-24B	24	20.84	+5Vaux	0.5	Yes	U-Bracket	UL, TUV, CE	
400	500	4 x 7 x 1.7"	FSP500M-K47-36B	36	13.89	+5Vaux	0.5	Yes	U-Bracket	UL, TUV, CE	
400	500	4 x 7 x 1.7"	FSP500M-K47-48B	48	10.42	+5Vaux	0.5	Yes	U-Bracket	UL, TUV, CE	
350	450	4 x 7 x 1.7"	FSP500M-K47-A12B	12	37.50	+5Vaux	2.0	Yes	U-Bracket	UL, TUV, CE	Class-II design
400	500	4 x 7 x 1.7"	FSP500M-K47-A18B	18	27.78	+5Vaux	2.0	Yes	U-Bracket	UL, TUV, CE	Class-II design
400	500	4 x 7 x 1.7"	FSP500M-K47-A24B	24	20.84	+5Vaux	2.0	Yes	U-Bracket	UL, TUV, CE	Class-II design
400	500	4 x 7 x 1.7"	FSP500M-K47-A36B	36	13.89	+5Vaux	2.0	Yes	U-Bracket	UL, TUV, CE	Class-II design
400	500	4 x 7 x 1.7"	FSP500M-K47-A48B	48	10.42	+5Vaux	2.0	Yes	U-Bracket	UL, TUV, CE	Class-II design
	600	4 x 8 x 2.58"	FSP600M-K48-12C	12	50.00	+5Vaux	0.2	Yes	Box	UL, TUV, CE	
	650	4 x 8 x 2.58"	FSP650M-K48-18C	18	36.12	+5Vaux	0.2	Yes	Box	UL, TUV, CE	
	650	4 x 8 x 2.58"	FSP650M-K48-24C	24	27.09	+5Vaux	0.2	Yes	Box	UL, TUV, CE	
	650	4 x 8 x 2.58"	FSP650M-K48-36C	36	18.06	+5Vaux	0.2	Yes	Box	UL, TUV, CE	
	650	4 x 8 x 2.58"	FSP650M-K48-48C	48	13.55	+5Vaux	0.2	Yes	Box	UL, TUV, CE	

Notes: *1) Input voltage AC 100~240V *2) 50°C Operation Temperature *3) Please check certificate schedule before design

Product Advantages

PC ATX



- IEC 60601-1, EN 60601-1, ANSI/AAMI ES 60601-1 approval
- Comply with Medical IEC 60601-1-2 EMC standard
- Comply with Intel ATX 12V design guide
- Output power from 220W to 700W
- Form factor PS-II, 1U & FLEX

Adapter



- IEC 60601-1, EN 60601-1, ANSI/AAMI ES 60601-1 approval
- Comply with Medical IEC 60601-1-2 EMC standard
- Comprehensive product line and option of various output voltage
- High efficiency comply with DOE and CoC efficiency
- Low power consumption for no load condition
- Output power from 25W to 250W

Open Frame



- IEC 60601-1, EN 60601-1, ANSI/AAMI ES 60601-1 approval
 - Comply with Medical IEC 60601-1-2 EMC standard
 - Comprehensive product line and option of various output voltage
 - Output power from 55W to 650W
-

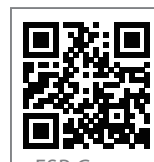


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FSP Group



UPS

OFF LINE

LINE INTERACTIVE

ON LINE

MODULAR



POWER

NEVER ENDS

<https://energy.fsp-europe.com/>

Fortron Source (Europa) GmbH | FSP Group
Carl-Friedrich-Benz-Straße 13, 47877 Willich, Germany

Features

- Compact size with stand and mounting flexibility
- Excellent microprocessor control for high reliability
- Auto restart while AC is recovering
- Simulated sine wave
- Cold start function



MODEL	NANO 400	NANO 600	NANO 800
CAPACITY	400VA / 240W	600VA / 360W	800VA / 480W
INPUT			
Voltage	220 / 230 / 240Vac		
Voltage Range	180-270Vac		
Frequency Range	50Hz/60Hz (auto sensing)		
OUTPUT			
AC Voltage Regulation (Batt. Mode)	±10%		
Frequency Range (Batt. Mode)	50Hz ±1 Hz/60Hz ±1 Hz		
Transfer Time	Typical 2-6 ms		
Waveform (Batt. Mode)	Simulated Sine Wave		
BATTERY			
Battery Type & Number	12V / 4.5Ah x 1	12V / 7Ah x 1	12V / 9Ah x 1
Typical Recharge Time	8 hours up to 90% capacity		
INDICATORS			
AC Mode	Green lighting		
Battery Mode	Green flashing		
ALARM			
Battery Mode	Sounding every 10 seconds		
Low Battery	Sounding every second		
Fault	Continuously sounding		
PROTECTION			
Full Protection	Overload, discharge and overcharge protection		
PHYSICAL			
Dimension, D X W X H (mm)	228 x 82.5 x 207 (Vertically stand)		
Net Weight (kgs)	2.2	2.7	3.1
ENVIRONMENT			
Humidity	0-90% RH @ 0- 40°C (non-condensing)		
Noise Level	Less than 40dB		

* Product specifications are subject to change without further notice

Features

- 600VA / 800VA Standby UPS
- Compact size can be desktop or wall-mounted
- Excellent microprocessor control for high reliability
- Auto restart while AC is recovering
- Simulated sine wave output
- Cold start function
- 2 ports USB charger 5V / 1A (Max.)
- RJ45 surge protection (NanoFit 800 only)



MODEL	NanoFit 600	NanoFit 800
CAPACITY	600VA / 360W	800VA / 480W
INPUT		
Voltage	220 / 230 / 240Vac	
Acceptable Voltage Range	180-270Vac	
Frequency Range	60Hz / 50Hz (Auto sensing)	
OUTPUT		
Output Voltage	220 / 230 / 240Vac	
AC Voltage Regulation (Batt. Mode)	±10%	
Frequency Range (Batt. Mode)	60Hz or 50Hz ±1Hz	
Transfer Time	Typical 2-6 ms, Max. 10ms	
Waveform (Batt. Mode)	Simulated Sinewave	
BATTERY		
Battery Type & Numbe	12V / 4.5Ah x 1	12V / 5Ah x 1
Typical Recharge Time	8 hours recover to 90% capacity	
INDICATORS		
Line Mode	Green lighting	
Battery Mode	Yellow flashing	
Fault	Red lighting	
ALARM		
Battery Mode	Beeps every 10 seconds	
Low Battery	Beeps every second	
Overload	Beeps every 0.5 second	
Fault	Continuously beeping	
PROTECTION		
Full Protection	Overload, discharge and overcharge protection	
PHYSICAL		
Dimension, D X W X H (mm)	305 x 158.5 x 95 mm	
Net Weight (kgs)	2.6	2.9
ENVIRONMENT		
Humidity	0-90% RH @ 0- 40°C (non-condensing)	
Noise Level	Less than 40dB	

* Product specifications are subject to change without further notice

Line Interactive | Eco

400/600/800

Features

- Compact size
- Excellent microprocessor control for high reliability
- Boost and buck AVR for voltage stabilization
- Auto restart while AC is recovering
- Simulated sine wave output
- Off-mode charging
- Cold start function



MODEL	Eco 400	Eco 600	Eco 800
CAPACITY	400VA / 240W	600VA / 360W	800VA / 480W
INPUT			
Voltage	220 / 230 / 240Vac		
Voltage Range	162-268Vac / 170-280Vac / 177-290Vac		
Frequency Range	60 / 50Hz (auto sensing)		
OUTPUT			
Voltage	110 / 120Vac or 220 / 230 / 240Vac		
AC Voltage Regulation (Batt. Mode)	±10%		
Frequency Range (Batt. Mode)	60Hz or 50Hz ± 1Hz		
Transfer Time	2-6 ms typical, 10 ms max		
Waveform (Batt. Mode)	Simulated Sinewave		
BATTERY			
Battery Type & Number	12V / 4.5Ah x 1	12V / 5Ah x 1	12V / 5Ah x 1
Typical Recharge Time	4-6 hours recover to 90% capacity		
INDICATORS			
AC Mode	Blue lighting		
Battery Mode	Blue flashing		
ALARM			
Battery Mode	Beeps every 10 seconds		
Low Battery	Beeps every second		
Overload	Beeps every 0.5 seconds		
Fault	Continuously beeping		
PROTECTION			
Full Protection	Overload, discharge, and overcharge protection		
PHYSICAL			
Dimension, D x W x H (mm)	245 x 163 x 90		
Net Weight (kgs)	3.5	4	4.5
ENVIRONMENT			
Humidity	0-90% RH @ 0- 40°C (non-condensing)		
Noise Level	Less than 40dB		
BACKUP TIME			
Battery Config.	4.5Ah x 1	5.0Ah x 1	5.0Ah x 1
Backup time	10 mins	14 mins	20 mins
Load Condition	Mac book 13" (60W)*1	Mac book 15" (60W)*1	Mac book 13" (60W)*1

* Product specifications are subject to change without further notice

Line Interactive | FP

600/800/1000/1500/2000

Features

- Compact size
- Excellent microprocessor control for high reliability
- Boost and buck AVR for voltage stabilization
- Auto restart while AC is recovering
- Simulated sine wave
- Off-mode charging
- Cold start function



MODEL	FP 600	FP 800	FP 1K	FP 1.5K	FP 2K
CAPACITY	600VA / 360W	800VA / 480W	1000VA / 600W	1500VA / 900W	2000VA / 1200W
INPUT					
Voltage	110 / 120Vac or 220 / 230 / 240Vac				
Voltage Range	81-145Vac / 162-290Vac				
Frequency Range	60 / 50Hz (auto sensing)				
OUTPUT					
Voltage	110 / 120Vac or 220 / 230 / 240Vac				
AC Voltage Regulation (Batt. Mode)	±10%				
Frequency Range (Batt. Mode)	60Hz or 50Hz ±1 Hz				
Transfer Time	Typical 2-6 ms				
Waveform (Batt. Mode)	Simulated Sinewave				
BATTERY					
Battery Type & Number	12V / 7Ah x 1	12V / 9Ah x 1	12V / 7Ah x 2	12V / 9Ah x 2	12V / 9Ah x 2
Typical Recharge Time	4 hours recover to 90% capacity		4-6 hours recover to 90% capacity		
INDICATORS					
AC Mode	Green lighting		Green lighting		
Battery Mode	Green flashing		Yellow flashing		
Fault	N/A		Red lighting		
ALARM					
Battery Mode	Beeps every 10 seconds				
Low Battery	Beeps every second				
Overload	Beeps every 0.5 second				
Fault	Continuously beeping				
PROTECTION					
Full Protection	Overload, discharge and overcharge protection				
PHYSICAL					
Dimension, D X W X H (mm)	279 x 101 x 142		320 x 130 x 182		
Net Weight (kgs)	4.25	4.9	8.2	10.4	11
ENVIRONMENT					
Humidity	0-90% RH @ 0- 40°C (non-condensing)				
Noise Level	Less than 40dB				
BACKUP TIME					
Battery Config.	7.0Ah x 1	9.0Ah x 1	7.0Ah x 2	9.0Ah x 2	9.0Ah x 2
Backup time	19 mins	20 mins	18 mins	18 mins	15 mins
Load Condition	Mac book 15" (90W)*1	Mac book 13" (60W)*2	Mac book 13" (60W)*1 Mac book 15" (90W)*1	Mac book 13" (60W)*2 Mac book 15" (90W)*1	Mac book 13" (60W)*2 Mac book 15" (90W)*2

* Product specifications are subject to change without further notice



iFP Series intelligent UPS

A Great Partner for Small Equipment



Laptop



Router



Security
Systems



Voip Phone
Systems



Surveillance
Systems

What's new

- Touch LCD Display Panel
- USB communication port
- RJ11/RJ45 connector that provides surge protection
- Multinational power sockets (Europe, U.S., India, China, as well as IDC-dedicated and multinational universal sockets)

Product Features

- Compact size
- Excellent microprocessor control guarantees high reliability
- Boost and buck AVR for voltage stabilization
- Auto restart while AC is recovering
- Provides simulated sine wave backup power to protect electrical equipment
- Off-mode charging
- Cold start function

The iFP series is equipped with automatic voltage regulation to reduce the impact of unstable voltage on equipment. The intelligent UPS' functions can also provide power during outages, and the battery automatically charges when power is restored. FSP's intelligent UPS can provide equipment with an uninterrupted supply of power at any time.



220V

iFP can be monitored by computer software.



FSP UPS provides back up battery power so you can work through short and medium length power outages.



Line Interactive | iFP

600/800/1000/1500/2000

Features

- Compact size
- Excellent microprocessor control guarantees high reliability
- Boost and buck AVR for voltage stabilization
- Auto restart while AC is recovering
- Simulated sine wave
- Off-mode charging
- Cold start function
- RJ11 surge protection for 600/800 model
- RJ45 surge protection for 1000/1500/2000 model
- Built-in USB communication port
- Touch screen LCD to display UPS information circularly



MODEL	iFP 600	iFP 800	iFP 1000	iFP 1500	iFP 2000
CAPACITY	600VA / 360W	800VA / 480W	1000VA / 600W	1500VA / 900W	2000VA / 1200W
INPUT					
Voltage	220 / 230 / 240Vac				
Voltage Range	140-290Vac				
Frequency Range	60 / 50Hz (auto sensing)				
OUTPUT					
Voltage	220 / 230 / 240Vac				
AC Voltage Regulation (Batt. Mode)	±10%				
Frequency Range (Batt. Mode)	60Hz or 50Hz ± 1Hz				
Transfer Time	Typical 2-6 ms				
Waveform (Batt. Mode)	Simulated Sinewave				
BATTERY					
Battery Type & Number	12V / 7Ah x 1	12V / 9Ah x 1	12V / 7Ah x 2	12V / 9Ah x 2	12V / 9Ah x 2
Typical Recharge Time	4 hours recover to 90% capacity		4-6 hours recover to 90% capacity		
INDICATORS					
LCD Display	Digital information				
ALARM					
Battery Mode	Beeps every 10 seconds				
Low Battery	Beeps every second				
Overload	Beeps every 0.5 seconds				
Fault	Continuously beeping				
PROTECTION					
Full Protection	Overload, discharge and overcharge protection				
PHYSICAL					
Dimension, D x W x H (mm)	300 x 101 x 142			320 x 130 x 182	
Net Weight (kgs)	4.25	4.9	8.2	10.4	11
ENVIRONMENT					
Humidity	0-90% RH @ 0- 40°C (non-condensing)				
Noise Level	Less than 40dB				
BACKUP TIME					
Battery Config.	7.0Ah x 1	9.0Ah x 1	7.0Ah x 2	9.0Ah x 2	9.0Ah x 2
Backup time	19 mins	20 mins	18 mins	18 mins	15 mins
Load Condition	Mac book 15" (90W)*1	Mac book 13" (60W)*2	Mac book 13" (60W)*1 Mac book 15" (90W)*1	Mac book 13" (60W)*2 Mac book 15" (90W)*1	Mac book 13" (60W)*2 Mac book 15" (90W)*2

* Product specifications are subject to change without further notice

EUFO SERIES



High-Level Line-Interactive UPS

1.1KVA-3KVA

Applications:



Work-Stations



Rack server



Network device



Multiple communication

Professional Line-Interactive UPS Solutions

Eufo series rating is from 1.1kVA to 3.0kVA and implemented protect functions for power failure, surge overvoltage and brownout. Rack/Tower with easy-shift LCD design is flexible for installation. moreover, this series built-in Efficiency corrective Optimizer (ECO) that the efficiency is up to 98% for more energy saving. The application is suitable for networking, telecom, server and mission-critical applications.

GENERAL FEATURES

- Pure sine wave
- Output power factor 0.9
- Excellent microprocessor control for high reliability
- User-friendly and easy-shift LCD design
- Rack/Tower 2 in 1 design with rotatable LCD
- Boost and buck AVR for voltage stabilization
- Programmable power management outlets
- ECO operation for energy saving
- Emergency power off function (EPO) RJ45 Surge protector
- Hot-swappable battery design
- Built-in internal battery & extend battery function
- Multiple communication available

Microprocessor-based line interactive design

Eufo series UPS is designed with microprocessor controller for fast response to power disturbances.

Pure sine wave output

With pure sine wave output, Eufo series guarantees compatibility for all kinds of loads. It's perfect power protection for versatile applications such as networking, telecom and other mission-critical applications.

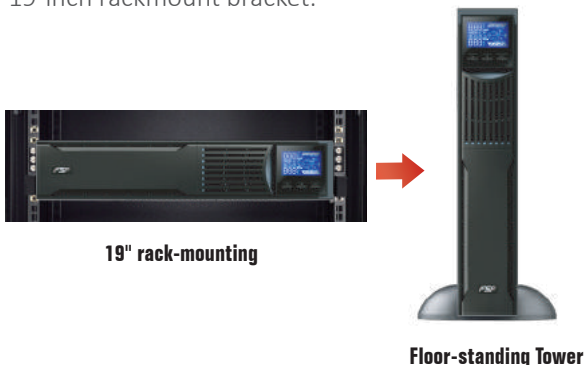
User-friendly and easy-shift LCD display

The front panel digital display can be easily shifted through LCD setting to suit the installation format, vertically stand or flat wall mount.



Rack / Tower design

Eufo series is designed in true universal-mount case. It can be easily installed as floor-standing tower or in 19-inch rackmount bracket.



Built-in boost and buck AVR

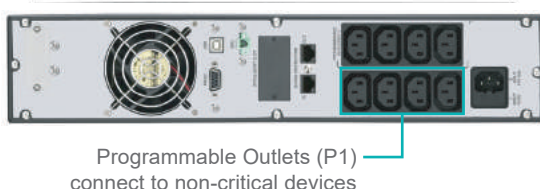
With built-in voltage regulator, the UPS will maintain regulated nominal output without using battery power during brownouts and overvoltages.

Output power factor 0.9

Eufo series is a high-density UPS with output power factor 0.9 to provide higher performance and efficiency to critical applications.

Programmable power management outlets

With programmable power management outlets, users can easily and independently control load segments. During power failure, this feature enables users to extend battery time to missioncritical devices by shutting down the non-critical devices.



Programmable Outlets (P1) connect to non-critical devices

ECO operation for energy saving (Efficiency Corrective Optimizer)

The ECO function allows cost-effective operation of UPS Systems as high as 98%. In this operation mode, load is supplied by the mains. When battery is fully charged, the fan will stop running for energy saving. In the event of a mains failure, the inverter takes over the load and provides supply continuity to the connected systems.



Emergency Power Off Function (EPO)

This feature can secure the personnel and equipment in case of fires or other emergencies.

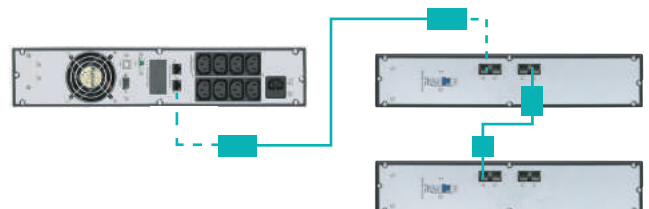
Hot-swappable battery design

This design ensures clean and uninterruptible power to protected equipment during battery replacement.



Extend battery capacity Function

Eufo series offer extend battery capacity function for long back up time purpose.



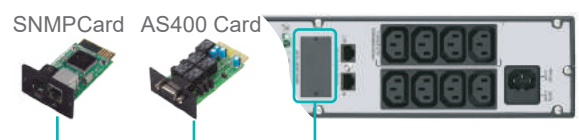
RJ-45 Surge protector

Eufo Series implements RJ-45 Surge Protection ports to prevent Ethernet network damage caused by lightning or ground surges.

Multiple communication

- USB port
- RS-232 port
- Intelligent slot for SNMP or Relay Card (option)

Also offer free monitoring software, ViewPower, downloaded from the internet. This advanced and networking software supports various operating systems and multiple languages.



TECHNICAL SPECIFICATIONS

MODEL		Eufo 1.1K		Eufo 2K		Eufo 3K	
PHASE		Single phase with ground					
CAPACITY		1100 VA / 990 W		2000 VA/ 1800 W		3000 VA/ 2700 W	
INPUT							
Voltage Range		208/220/230/240 VAC					
Acceptable Voltage Range		162-290 VAC					
Frequency Range		50Hz/60Hz (Auto sensing)					
OUTPUT							
Output Voltage		208/220/230/240VAC					
Voltage Regulation		± 1.5% (Before battery Alarm)					
Frequency Range(Batt. Mode)		50 Hz or 60 Hz ± 1 Hz					
Current Crest Ratio		3:1 (max.)					
Harmonic Distortion		2% max @ 100% linear Load ; 5% max @ 100% non linear load (Before low battery alarm)					
Transfer Time		2-6ms (typical), 10ms max.					
Waveform (Batt. Mode)		Pure Sinewave					
EFFICIENCY							
ECO Mode		97%					
Boost/Buck Mode		95%					
Battery Mode		89%		91%		92%	
BATTERY							
Standard Model	Battery Type & Numbers	12 V/9 Ah x 2		12 V/9 Ah x 4		12 V/9 Ah x 6	
	Charging Current (max.)	1.5 A					
	Charging Voltage	27.4 VDC ± 1%		54.8 VDC ± 1%		82.1 VDC ± 1%	
	Typical Recharge Time	4 hours recover to 90% capacity					
Long-Run Model	Charging Current (max.)	1A/2A/4A/6A/8A					
	Charging Voltage	27.4 VDC ± 1%		54.8 VDC ± 1%		82.1 VDC ± 1%	
ALARM							
Battery Mode		Sounding every 10 seconds					
Low Battery		SSounding twice every second					
Overload		Sounding every second					
Fault		Continuously sounding					
AC INPUT & OUTPUT CONNECTORS							
AC Input Connector		1 x IEC 320 C14		1 x IEC 320 C14		1 x IEC 320 C20	
AC Output Connector		8 x IEC 320 C13		8 x IEC 320 C13		8 x IEC 320 C13	
STANDARDS							
Safety / EMC		IEC 62040-1 (safety) / IEC-62040-2 (EMC) / CE					
PHYSICAL							
Standard Model	Dimension, D x W x H(mm)	410 (D) x 438 (W) x 88 (H)		510 (D) x 438 (W) x 88 (H)		630 (D) x 438 (W) x 88 (H)	
	Net Weight (kgs)	13.4		21.5		29.3	
Long-Run Model	Dimension, D x W x H(mm)	410 (D) x 438 (W) x 88 (H)		410 (D) x 438 (W) x 88 (H)		410 (D) x 438 (W) x 88 (H)	
	Net Weight (kgs)	9.0		10.8		11.9	
ENVIRONMENT							
Operation Humidity		0-90% RH @ 0-40°C (Non-condensing)					
Noise Level		Less than 45 dBA @ 1 Meter					
MANAGEMENT							
Smart RS-232 / USB		Supports Windows 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC					
Optional SNMP		Power management from SNMP manager and web browser					

Product specifications are subject to change without further notice



Backup Time Table for Eufo Series

		Backup Time with Load (Min)			
	Battery Bank	25%	50%	75%	100%
Eufo 1.1K	internal battery	22.80	8.65	4.95	3.00
	+ 1 BB-24/18RT (4 x 9Ah Batteries)	76.13	32.79	20.00	13.00
Eufo 2K	internal battery	24.50	11.00	5.60	4.00
	+ 1 BB-48/18RT (8 x 9Ah Batteries)	97.00	47.00	27.50	20.00
Eufo 3K	internal battery	27.25	11.50	6.60	4.00
	+ 1 BB-72/18RT (12 x 9Ah Batteries)	106.50	46.60	28.37	20.50



Features

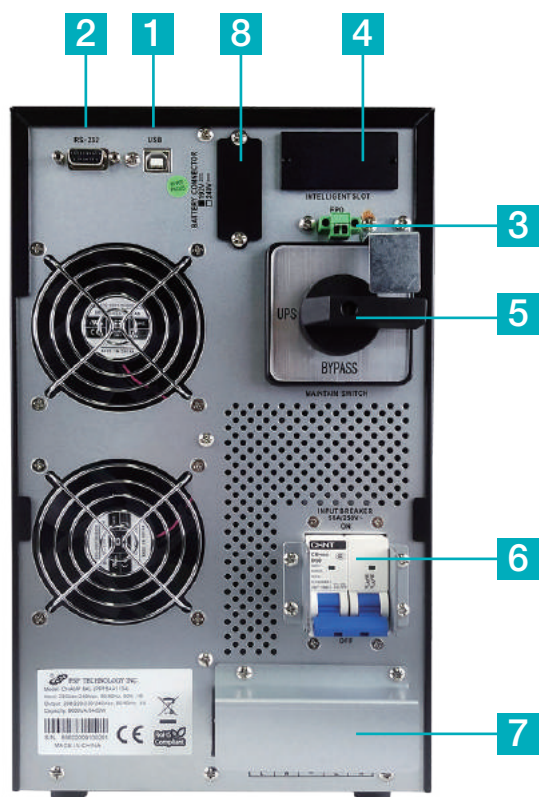
- True double-conversion
- Excellent microprocessor control for high reliability
- Input power factor correction
- Output power factor 0.9
- Wide input voltage (120V - 300V)
- Converter mode available
- ECO mode for energy saving(Only available for 1-3KVA)
- Adjustable battery string numbers only available for 6K / 10K models
- Generator compatible
- Smart SNMP works well with either USB or RS-232 together
- Comprehensive LCD display allows easy monitoring and access of UPS status



MODEL		Champ 1K	Champ 2K	Champ 3K	Champ 6K	Champ 10K
PHASE		Single phase with ground				
CAPACITY		1000VA / 900W	2000VA / 1800W	3000VA / 2700W	6000VA / 5400W	10000 VA / 9000 W
INPUT						
Nominal Voltage		200 / 208 / 220 / 230 / 240Vac			208 / 220 / 230 / 240Vac	
Voltage Range		120~300Vac (Based on load at 50%) 160-280Vac (Based on load at 100%)			110-300Vac (Based on load at 50%) 176-300Vac (Based on load at 100%)	
Frequency Range		40~70Hz			46~54Hz or 56~64Hz	
Power Factor		≥ 0.99 @ Nominal Voltage (100% load)				
OUTPUT						
Output Voltage		200 / 208 / 220 / 230 / 240Vac			208 / 220 / 230 / 240Vac	
Voltage Regulation		± 1%				
Frequency Range (Synchronized Range)		47~53Hz or 57~63Hz			46~54Hz or 56~64Hz	
Frequency Range (Batt. Mode)		50Hz ± 0.25Hz or 60Hz ± 0.3Hz			50Hz or 60Hz ± 0.1Hz	
Inverter Crest Ratio		3:1				
Harmonic Distortion (THDv)		≤ 3% THD (Linear Load) ≤ 6% THD (Non-linear Load)			≤ 3% THD (Linear Load) ≤ 5% THD (Non-linear Load)	
Transfer Time	AC Mode to Battery Mode	Zero				
	Inverter to Bypass	4 ms (Typical)			Zero	
Waveform (Batt. Mode)		Pure Sinewave				
EFFICIENCY						
AC Mode		88%	88%	90%	92%	93%
Battery Mode		83%	87%	88%	90%	91%
BATTERY						
Standard Model	Battery Type	12V / 9Ah	12V / 9Ah	12V / 9Ah	12V / 9Ah	
	Numbers in string	2	4	6	16	16
	Typical Recharge Time	4 hours recover to 90% capacity			9 hours recover to 90% capacity	
	Charging Current (max.)	1.0 A			1A / 2A (Adjustable)	
	Charging Voltage	27.4Vdc ± 1%	54.7Vdc ± 1%	82.1Vdc ± 1%	218.4Vdc ± 1%	218.4Vdc ± 1%
INDICATORS						
LCD Panel		Load level, Battery level, Line mode, Battery mode, Bypass mode, ECO mode and Fault indicators				
ALARM						
Battery Mode		Beeps every 4 seconds				
Low Battery		Beeps every second				
Overload		Beeps twice per second				
Fault		Continuously beeping				
PHYSICAL						
Standard Model	Dimension, D x W x H (mm)	282 x 145 x 220	397 x 145 x 220	421 x 190 x 318	369 x 190 x 688	442 x 190 x 688
	Net Weight (kgs)	9.8	17	27.6	61	66
Long-run Model	Dimension, D x W x H (mm)	282 x 145 x 220	397 x 145 x 220	397 x 145 x 220	369 x 190 x 318	442 x 190 x 318
	Net Weight (kgs)	4.1	6.8	7.4	12	16
ENVIRONMENT						
Humidity		20-90% RH @ 0-40°C (non-condensing)			0-95% RH @ 0-50°C (non-condensing)	0-95% RH @ 0-40°C (non-condensing)
Noise Level		Less than 50dBA @ 1 Meter			Less than 55dBA @ 1 Meter	Less than 58dBA @ 1 Meter
MANAGEMENT						
Smart RS-232 / USB		Supports Windows® 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10, Linux and MAC				
Optional SNMP		Power management from SNMP manager and web browser				

* In Frequency converter mode, the output capacity derate to 80% with output voltage adjusted to 200 / 208Vac

* Product specifications are subject to change without further notice



- 1 USB interface
- 2 RS-232 interface
- 3 Emergency stop (EPO)
- 4 Intelligent slot for SNMP / AS400 / RS485-Modbus
- 5 Manual Bypass.
- 6 Input protector.
- 7 Terminal cover.
- 8 External battery connector

Contents in package

- Battery cabel
- Viewpower CD
- USB cable
- User Manual



Saving recharging time

Saving recharging time by adjustable current 1,2 A through UPS panel.



Easy Maintenance

Built-in maintenance bypass to shorten maintenance time and secure operation safety.



High Flexibility for Your Project Budget

Compatible with the battery up to 9Ah, maximum 1 external cabinets. Each cabinet is with adjustable 16-20pcs battery. It flexibly adapts your project budget and backup time.

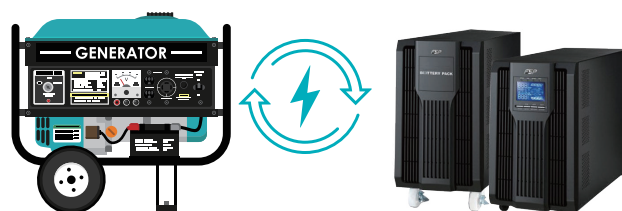


16, 17, 18, 19, 20pcs



Generator compatible

Connecting with generator for building emergency situation.



Accessory

Battery Cabinet

Model	P/N	Pictures	Champ Tower	Battery
BB-192/09T	MPF0011900GP		Champ TW 6K Champ TW 10K	Battery bank with 16 pcs 9Ah battery Contact FSP local authorized partner for battery adjustment
BB-240/10T	MPF0011901GP		Champ TW 6K Champ TW 10K	Battery bank with 20 pcs 9Ah battery Contact FSP local authorized partner for battery adjustment

Network Management

SNMP card SNMP box	MPF0000400GP 31-011163-07G		1. Allows control and monitoring of UPS 2. Real-time dynamic graphs of UPS data 3. Warning notifications via audible alarm, broadcast, mobile messenger, e-mail
Modbus card	S98-000051-07091G		1. Real-time control and monitoring of UPS 2. Supports Modbus RTU protocol 3. Provides MODBUS functions including read Holding Registers and write Registers 4. Provides surge protection
Relay card	MPF0007500GP		1. The AS400 communication card provides contact closures for remote monitoring UPS. 2. To meet different application requirement, the AS400 card is capable of selection the status of the dry-contact signal (active close or active open) by setting jumper.
Environment Monitor Device	98-000069-00G		1. Measure temperatures between 0 to 100°C with an accuracy of $\pm 1.5^{\circ}\text{C}$ 2. Measure relative humidity between 10 to 90% RH with an accuracy of $\pm 3\%$ Optional smoke alarm available
EPO cable	5370-1000-0011		1. Cable to connect emergency power off port.
Battery cable	10-112480-00G		1. Cable to connect UPS and external battery cabinet.

Features

- True double-conversion
- Excellent microprocessor control for high reliability
- Input power factor correction
- Output power factor 0.9
- Wide input voltage (120V - 300V)
- Converter mode available
- ECO mode for energy saving
- Generator compatible
- Smart SNMP works well with either USB or RS-232 together
- Comprehensive LCD display allows easy monitoring and access of UPS status



MODEL		Champ RM 1K	Champ RM 2K	Champ RM 3K
PHASE		Single phase with ground		
CAPACITY		1000VA / 900W	2000VA / 1800W	3000VA / 2700W
INPUT				
Nominal Voltage		208 / 220 / 230 / 240Vac		
Input Voltage Range		120-300Vac at 50% load 180-300Vac at 100% load		
Frequency Range		40~70Hz		
Power Factor		≥ 0.99 @ Nominal Voltage (100% load)		
OUTPUT				
Output Voltage		208 / 220 / 230 / 240Vac		
Voltage Regulation		± 1%		
Frequency Range (Synchronized Range)		47~53Hz or 57~63Hz		
Frequency Range (Batt. Mode)		50Hz ± 0.25Hz or 60Hz ± 0.3Hz		
Current Crest Ratio		3:1		
Harmonic Distortion		≤ 3% THD (Linear Load) / ≤ 6% THD (Non-linear Load)		
Transfer Time	AC Mode to Batt. Mode	Zero		
	Inverter to Bypass	4 ms (Typical)		
Waveform (Batt. Mode)		Pure Sinewave		
EFFICIENCY				
AC Mode		88%	89%	90%
Battery Mode		83%	87%	88%
BATTERY				
Standard Model	Battery Type	12V / 9Ah	12V / 9Ah	12V / 9Ah
	Numbers	2	4	6
	Typical Recharge Time	4 hours recover to 90% capacity		
	Charging Current (max.)	1.0A		
	Charging Voltage	27.4Vdc ± 1%	54.7Vdc ± 1%	82.1Vdc ± 1%
INDICATORS		Load level, Battery level, AC mode, Battery mode, Bypass mode and Fault indicators		
LCD Panel				
ALARM				
Battery Mode		Beeps every 4 seconds		
Low Battery		Beeps every second		
Overload		Beeps twice every second		
Fault		Continuously beeping		
PHYSICAL				
Standard Model	Dimension, D x W x H (mm)	310 x 438 x 88	410 x 438 x 88	630 x 438 x 88
	Net Weight (kgs)	12	19	29.3
Long-run Model*	Dimension, D x W x H (mm)	310 x 438 x 88	410 x 438 x 88	410 x 438 x 88
	Net Weight (kgs)	9	12	14.2
ENVIRONMENT				
Humidity		20-90% RH @ 0- 40°C (non-condensing)		
Noise Level		Less than 50dBA @ 1 Meter		
MANAGEMENT				
Smart RS-232 / USB		Supports Windows® 2000 / 2003 / XP / Vista / 2008 / 7 / 8, Linux, Unix and MAC		
Optional SNMP		Power management from SNMP manager and web browser		

* 1K-3K: Derate to 80% of capacity in Frequency converter mode or when the output voltage is adjusted to 208Vac.

* Product specifications are subject to change without further notice

6KLVA . 10KLVA ONLINE RACK UPS



CHAMP RM SERIES

High Flexibility Online UPS Solutions

Champ Series is the high power density double-conversion online UPS with an output power factor of 0.9. It's designed in a small cabinet with a microprocessor controller.

Champ Series also has USB and RS-232 communication ports as standard, with a built-in intelligent slot.



Pure sine wave



Generator
Compatible



Server room



Long
Autonomy

GENERAL FEATURES

- True double-conversion
- Microprocessor control optimizes reliability
- Input power factor correction ≥ 0.99
- Output power factor 0.9
- Wide input voltage (110V - 300V)
- Converter mode available
- ECO mode for energy saving
- Generator compatible
- Smart SNMP works well with either USB or RS-232 together display allows easy monitoring and access of UPS status
- Adjustable battery numbers 16 - 20 pcs.
- Rack/Tower 2 in 1 design with rotatable LCD



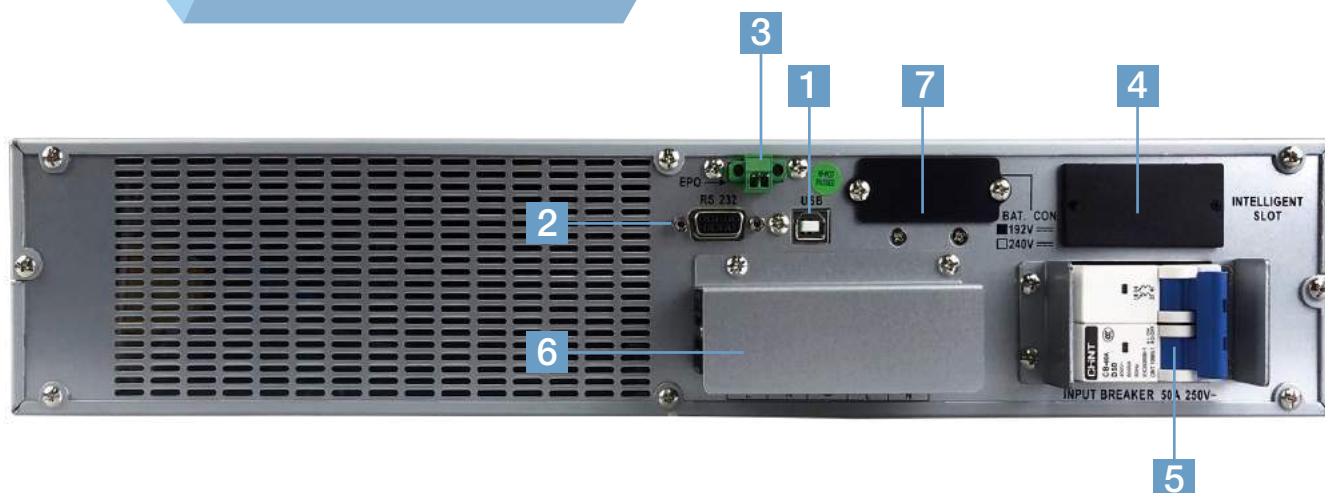
TECHNICAL SPECIFICATIONS

MODEL		Champ RM 6KL	Champ RM 10KL
PHASE		Single phase with ground	
CAPACITY		6000 VA / 5400 W	10000 VA / 9000 W
INPUT			
Nominal Voltage		208/220/230/240VAC	
Voltage Range		110-300 VAC $\pm$ 3% at 50% Load 176-300 VAC $\pm$ 3% at 100% Load	
Frequency Range		46~54 Hz or 56~64 Hz	
Power Factor		$\geq$ 0.99 @ Nominal Voltage (100% Last)	
OUTPUT			
Nominal Voltage		208/220/230/240 VAC	
AC Voltage Regulation		$\pm$ 1%	
Frequency Range(Synchronized Range)		46~54 Hz or 56~64 Hz	
Frequency Range(Batt. Mode)		50 Hz or 60Hz $\pm$ 0.1 Hz	
Current Crest Ratio		3:1	
Harmonic Distortion		$\leq$ 3 % THD (Linear Load), $\leq$ 5 % THD (Non-linear Load)	
Transfer Time	AC mode to Battery mode	Zero	
	Inverter to Bypass	Zero	
Waveform (Batt. Mode)		Pure Sinewave	
EFFICIENCY			
Line Mode		92%	93%
Battery Mode		90%	91%
BATTERY			
Standard Model	Battery Type		
	Numbers		
	Typical Recharge Time	N/A	
	Charging Current (max.)		
Long-run Model	Charging Voltage		
	Battery Type	Depending on the capacity of external batteries	
	Numbers in string	16-20pcs (Adjustable)	
	Charging Current (max.)	1A/2A/4A/6A (Adjustable, 6A is only available for 16pcs batteries)	
		218.4 VDC $\pm$ 1% (Based on 16pcs batteries)	
INDICATORS			
LCD Display		Last level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators	
ALARM			
Battery Mode		Sounding every 4 seconds	
Low Battery		Sounding every second	
Overload		Sounding twice every second	
Fault		Continuously sounding	
AC INPUT & OUTPUT CONNECTORS			
AC Input Connector		Terminal block	
AC Output Connector		Terminal block	
STANDARDS			
Safety / EMC		IEC 62040-1 (safety) / IEC-62040-2 (EMC) / CE	
PHYSICAL			
Standard Model	Dimension, D x W x H(mm)	N/A	N/A
	Net Weight (kgs)	N/A	N/A
Long-run Model	Dimension, D x W x H(mm)	UPS Unit: 530x438x88 [2U]	580 x 438 x 133[3U]
	Net Weight (kgs)	15	18
ENVIRONMENT			
Operation Humidity		0-95% RH @ 0-40°C (non-condensing)	
Noise Level		Less than 50 dBA @ 1 Meter	Less than 58 dBA @ 1 Meter
MANAGEMENT			
Smart RS-232 / USB		Supports Windows 2000/2003/XP/Vista/2008/7, Linux and MAC	
Optional SNMP		Power management from SNMP manager and web browser	

*1K-3K: Derate to 80% of capacity in Frequency converter mode or when the output voltage is adjusted to 208VAC.
 6K/10K: Derate to 60% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 208VAC.
 Product specifications are subject to change without further notice

Backup Time Table for Champ Series

		Backup Time with Load (Min)			
Battery Bank		25%	50%	75%	100 %
Champ RM 6KL	BB-192/09RT(16pcs 9Ah)	40	15	9	6
	BB-240/10RT(20pcs 10Ah)	68	27	18	12
Champ RM 6KL	BB-192/09RT(16pcs 9Ah)	21	8	4	2
	BB-240/10RT(20pcs 10Ah)	40	16	9	6



- 1 USB interface
- 2 RS-232 interface
- 3 Emergency stop (EPO)
- 4 Intelligent slot for SNMP / AS400 / RS485-Modbus
- 5 Input protector.
- 6 Terminal cover.
- 7 External battery connector

Contents in package

- Battery cable
- Viewpower CD
- USB cable
- User Manual



Saving recharging time

Saving recharging time by adjustable current 1,2,4,6A



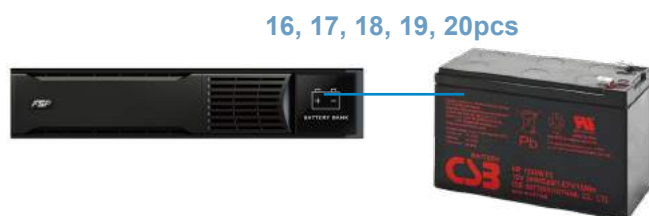
Easy Maintenance

External maintenance bypass to shorten maintenance time and secure operation safety.



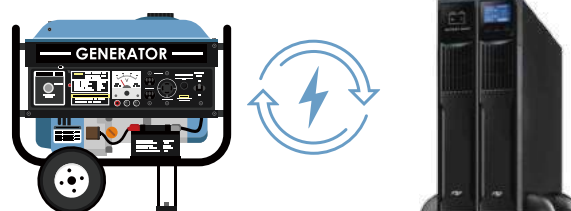
High Flexibility for Your Project Budget

Compatible with the battery up to 100Ah, maximum 6 external cabinets. Each cabinet is with adjustable 16-20pcs battery. It flexibly adapts your project budget and backup time.



Generator compatible

Connecting with generator for building emergency situation.



Accessory

Battery Cabinet				
Model	P/N	Pictures	Compatible Champ RM Series Model	Battery
BB-192/09RT	MPF0011800GP		Champ RM 6KL Champ RM 10KL	Battery bank with 16 pcs 9Ah battery Contact FSP local authorized partner for battery adjustment
BB-240/10RT	MPF0011801GP		Champ RM 6KL Champ RM 10KL	Battery bank with 20 pcs 9Ah battery. Contact FSP local authorized partner for battery adjustment

Network Management				
SNMP card SNMP box	MPF0000400GP 31-011163-07G		1. Allows control and monitoring of UPS 2. Real-time dynamic graphs of UPS data 3. Warning notifications via audible alarm, broadcast, mobile messenger, e-mail	
Modbus card	S98-000051-07091G		1. Real-time control and monitoring of UPS 2. Supports Modbus RTU protocol 3. Provides MODBUS functions including read Holding Registers and write Registers 4. Provides surge protection	
Relay card	MPF0007500GP		1. The AS400 communication card provides contact closures for remote monitoring UPS. 2. To meet different application requirement, the AS400 card is capable of selection the status of the dry-contact signal (active close or active open) by setting jumper.	
Environment Monitor Device	98-000069-00G		1. Measure temperatures between 0 to 100°C with an accuracy of $\pm 1.5^{\circ}\text{C}$ 2. Measure relative humidity between 10 to 90% RH with an accuracy of $\pm 3\%$ Optional smoke alarm available	
EPO cable	5370-1000-0011		1. Cable to connect emergency power off port.	
Battery cable	10-112480-00G		1. Cable to connect UPS and external battery cabinet.	

Premium featured **ONLINE** UPS



CLIPPERS RT SERIES

Clippers series is a premium featured online double-conversion UPS with Rack/Tower design and high efficiency to reduce customer's TCO (total cost of ownership).

The internal hot-swappable battery increases system reliability and reduces MTTR; the parallel function is designed for future equipment expansion

Its special firmware design can adapt various applications like laser printer, ultrasound device and supporting long back-up time with battery monitoring.



Data Center



Genset



Batt.Charger



Emergency
Power Backup

GENERAL FEATURES

- True double conversion
- Output power factor 1
- Rack/Tower 2 in 1 design with rotatable LCD
- Super Charger up to 12A for 1K, 8A for 2K/3K
- Output voltage regulation < 1%
- Higher output crest ratio 3:1
- 50Hz/60Hz frequency converter mode
- Programmable power management outlets
- Emergency power off function (EPO)
- Hot swappable battery design
- ECO mode for energy saving
- Support for laser printers and ultrasound systems
- Full time over-voltage cut-off and surge protection
- High power factor charger with low ripple current
- Low input THDi to reduce power system pollution
- Adjustable charging current via LCD panel
- Smart battery charger design to optimize battery performance
- Genset compatible

On Line | Clippers Series

1K/2K/3K



MODEL	CLIPPERS RT 1K		CLIPPERS RT 2K	CLIPPERS RT 3K
PHASE			Single phase with ground	
CAPACITY	1000VA / 1000W		2000VA / 2000W	3000VA / 3000W
INPUT				
Nominal Voltage			220 / 230 / 240 Vac	
Voltage Range	@ 50% load		110~300 Vac ± 5%	
	@100% load		160~300 Vac ± 5%	
Frequency Range			40~70Hz	
Harmonic Distortion(THDi)	@ 50% load		≥ 5% @ Nominal Input Voltage	
	@100% load			
Power Factor (@100% load)			≥ 0.99 @ Nominal Voltage	
OUTPUT				
Output Voltage			220 / 230 / 240 Vac	
AC Voltage Regulation(Batt.Mode)			± 1%	
Frequency Range (Synchronized Range)			46~54Hz or 56~64Hz	
Frequency Range (Batt. Mode)			50Hz or 60Hz ± 0.1Hz	
Current Crest Ratio			3:1 (max.)	
Harmonic Distortion	Linear Load		≤ 2 %	
	Non-linear load		≤ 4 %	
Transfer Time	Line to Battery		Zero	
	Inverter to Bypass		4 ms (Typical)	
Waveform(Batt. Mode)			Pure Sinewave	
Overload	AC mode	100~110% : 10mins ; 110~130% : 1 min ; >130% :1s		
	Battery mode	100~110% : 30s ; 110~130% : 10s ; >130% :1s		
EFFICIENCY				
AC Mode@full charged battery	≤ 89%	≤ 91%	≤ 91%	
ECO Mode@full charged battery		≤ 96%		
Battery Mode	≤ 88%	≤ 90%	≤ 90%	
BATTERY				
Battery Type			12V / 9Ah	
Numbers	2	4	6	
Typical Recharge Time(recover to 90% capacity)			3 hours	
Charging Current (Default 2A)	Max: 12A	Max: 8A	Max: 8A	
Charging Voltage (Vdc ± 1%)	27.4	54.8	82.1	
PHYSICAL				
Dimension, W x H x D (mm)	438 x 88 x 410	438 x 88 x 510	438 x 88 x 630	
Net Weight (without battery) (kgs)	6.6	9.4	12.4	
Net Weight (with battery)(kgs)	11.6	19.5	27.5	
ENVIRONMENT				
Humidity(non-condensing)			20-90 % RH @ 0- 40°C	
Noise Level (@ 1 Meter)			≤50 dBA	
Altitude(Max 3000m)			10% de-rating for over 1000m	
MANAGEMENT				
Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC			
SNMP(Optional)	Power management from SNMP manager and web browser			
STANDARD				
EMC/safety	EMC EN62040-2 C2 for CE models			

* Product specifications are subject to change without further notice

MODEL	BATTERY	Backup Time Table for Clippers Series (min)			
		25%	50%	75%	100%
Clippers 1 K	Internal 2*9Ah	23	9	5	3
	+1 BB-24/18RT (4*9AH)	90	40	25	17
	+2 BB-24/18RT (8*9AH)	150	77	46	32
Clippers 2 K	Internal 4*9Ah	24	10	5	3
	+1 BB-48/18RT (8*9AH)	90	41	25	17
	+2 BB-24/18RT (16*9AH)	150	79	48	33
Clippers 3 K	Internal 6*9Ah	24	10	5	3
	+1 BB-72/18RT (12*9AH)	90	41	25	17
	+2 BB-72/18RT (24*9AH)	150	79	48	33



TECHNICAL SPECIFICATIONS

MODEL	CLIPPERS RT 6KL	CLIPPERS RT 10KL
PHASE	Single phase with ground	
CAPACITY	6000 VA / 6000 W	10000 VA / 10000 W
INPUT		
Voltage	220/230/240 VAC	
Voltage Range	110-300 VAC $\pm$ 3% @ 50% load	
Frequency Range	46~54 or 56~64 Hz	
Harmonic Distortion(THDi)	< 6% (50% load)	
Power Factor(@100% load)	$\geq$ 0.99 @ nominal voltage	
OUTPUT		
Voltage	220/230/240 VAC	
AC Voltage Regulation (Batt. Mode)	$\pm$ 1%	
Frequency Range (Synchronized Range)	46~54 Hz or 56~64 Hz	
Frequency Range (Batt. Mode)	50 Hz $\pm$ 0.1 Hz or 60Hz $\pm$ 0.1 Hz	
Harmonic Distortion		
Linear Load	< 1%	
Non-linear load	< 4%	
Transfer Time		
AC Mode to Batt. Mode	0 ms	
Inverter to Bypass	0 ms	
Waveform	Pure sine wave	
EFFICIENCY		
AC Mode@full charged battery	94.5%	
ECO Mode@full charged battery	98.5%	
Battery Mode	92.0%	
BATTERY		
Battery Type	depend on application	
Numbers	16 ~ 20	16 ~ 20
Charging Voltage(Vdc $\pm$ 1%)	218.4~273	218.4~273
Charging Current(Default 2A)	4 A	
OPERATING ENVIRONMENT		
Humidity(non-condensing)	20-95 % RH @ 0- 40°C	
Noise Level (@ 1 Meter)	$\cong$ 55 dBA	$\cong$ 58 dBA
Altitude(Max 3000m)	10% de-rating for over 1000m	
OPERATING ENVIRONMENT		
Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC	
SNMP(Optional)	Power management from SNMP manager and web browser	
STANDARD		
EMC/safety	EMC EN62040-2 C2 for CE models	

* Product specifications are subject to change without further notice

Backup Time Table for Custos Series

		Backup Time with Load (Min)			
	Battery Bank	25%	50%	75%	100 %
CLIPPERS RT 6KL	+1 BB-240/9RT (20 x 9AH Batteries)	43.0	20.0	12.9	8.0
	+2 BB-240/9RT (40 x 9AH Batteries)	99.0	46.0	31.7	22.7
	+3 BB-240/9RT (60 x 9AH Batteries)	150.0	71.0	43.5	30.4
CLIPPERS RT 10KL	+1 BB-240/9RT (20 x 9AH Batteries)	22.0	9.0	6.0	3.0
	+2 BB-240/9RT (40 x 9AH Batteries)	54.0	23.0	16.9	12.0
	+3 BB-240/9RT (60 x 9AH Batteries)	88.0	38.0	23.0	16.0



On Line | Clippers Series

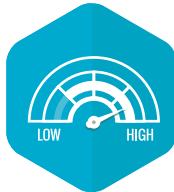
1K/2K/3K/6K/10K



Higher load
power capacity



Super Charger 12A



High Efficiency 96%



Emergency
Power Backup



Zero transfer time

User-friendly LCD display

The front panel display can be easily shifted through LCD setting to suit the installation format



Programmable outlet

Prioritizing connected equipment's required backup time.



Programmable Outlets (P1)
connect to non-critical devices

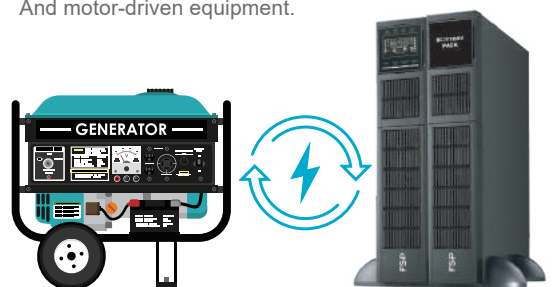
CV / CF Mode

Providing constant voltage and constant frequency



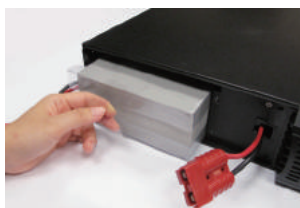
Special application

Compatible with genset, ISO Transformer
And motor-driven equipment.



Hot-Swappable battery

Battery replacement can be done without turning off
the UPS from the operation



Parallel option

Parallel ability up to 3 units to reach maximum 30KW
Only for model Clippers RT 6KL & Clippers RT 10KL



Accessory

Battery Cabinet

Model	P/N	Pictures	Compatible Clippers Series Model	Battery
BB-24/18RT	MPF0005500GP		Clippers RT 1K	Battery Bank 24V/18Ah (Rack&Tower) with 4 pieces 9Ah 12V Batteries
BB-48/18RT	MPF0005600GP		Clippers RT 2K	Battery Bank 48V/18Ah (Rack&Tower) with 8 pieces 9Ah 12V Batteries
BB-72/18RT	MPF0005800GP		Clippers RT 3K	Battery Bank 72V/18Ah (Rack&Tower) with 12 pieces 9Ah 12V Batteries

Network Management

SNMP card SNMP box	MPF0000400GP 31-011163-07G		1. Allows control and monitoring of UPS 2. Real-time dynamic graphs of UPS data 3. Warning notifications via audible alarm, broadcast, mobile messenger, e-mail
Modbus card	S98-000051-07091G		1. Real-time control and monitoring of UPS 2. Supports Modbus RTU protocol 3. Provides MODBUS functions including read Holding Registers and write Registers 4. Provides surge protection
Relay card	MPF0007500GP		1. The AS400 communication card provides contact closures for remote monitoring UPS. 2. To meet different application requirement, the AS400 card is capable of selection the status of the dry-contact signal (active close or active open) by setting jumper.
Environment Monitor Device	98-000069-00G		1. Measure temperatures between 0 to 100°C with an accuracy of $\pm 1.5^{\circ}\text{C}$ 2. Measure relative humidity between 10 to 90% RH with an accuracy of $\pm 3\%$ Optional smoke alarm available
Automatic Transfer Switch	MPF0013500GP		1. Max output power 10 A for IEC-C13 outlets, 16 A for IEC-C19 outlet 2. Transfer time 9-12ms (Typical), 16ms max.

Online UPS EPOS SERIES 10KVA-200KVA



EPOS SERIES



Data Center



Networking



Computer



Banking



Generator compatible

DSP technology guarantees high reliability

A Digital Signal Processor (DSP) technology digitizes the data and mathematically manipulates them to provide an improved solution with higher

Output power factor 1 (only for 10K-80K)

For critical applications, this 3-phase online UPS with output power factor 1.0 ensures higher efficiency and advanced performance.

Active power factor correction in all phases

Power factor correction is active in all phases and it can improve the efficiency of input.

Dual Inputs

Available for optional dual inputs to support various inputs to have the flexibility for system configuration.

Very powerful charger

Built-in 12A charger for 10K-40KVA models and 24A for 60K/80KVA models. It's to support very long runtime applications when connecting to the external battery cabinet's big capacity.

50Hz/60Hz frequency converter mode

Output frequency at 50Hz or 60Hz to suit power sensitive equipment.

ECO mode operation for energy saving

Eco mode improves the efficiency up to 98% to cut energy usage & cost. In this mode, loads are supplied by the mains directly. While mains failure, the UPS will constantly supply the power to the connected

Emergency power-off function (EPO)

In case of any emergency and fire, the EPO control mechanism can instantly shut down the system.

Adjustable charging current

Users can adjust charging current via LCD setting based on applications.

High overload capability

Supporting 110% overload capacity for 60 min and up to 1 min overload condition at 150% load.

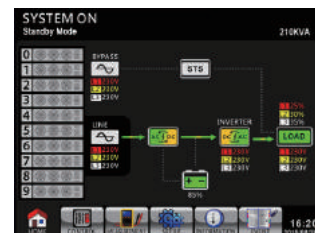
Optional parallel operation with common battery

The system can be operated in parallel, increasing the capacity and performance. This parallel UPS system can also share common battery packs.

Adjustable battery design

The number of connected batteries can be adjusted flexibly based on different power demands.

4.3" touch LCD for EPOS 10K-80K models



EPOS Series

MODEL	EPOS 3/1 10KL		EPOS 3/1 20KL	EPOS 3/3 10K(L)		EPOS 20K(L)	EPOS 3/3 30KL	EPOS 3/3 40KL	
PHASE	3-Phase in/ 1-Phase out with Neutral				3-phase in/3-phase out with Neutral				
CAPACITY	10KVA/10KW		20KVA/20KW		10KVA/10KW		20KVA/20KW	30KVA/30KW	40KVA/40KW
PARALLEL CAPABILITY	3								
INPUT									
Nominal Voltage				3 x 400 VAC (3Ph+N)					
Voltage Range		110-300 VAC @ 50% load 176-276 VAC @ 100% load			190-520 VAC(3-phase) @ 50% load 305-478 VAC(3-phase) @ 100% load				
Frequency Range				46~54Hz or 56~64Hz					
Power Factor				≥ 0.99 @ 100% load					
OUTPUT									
Output Voltage				208*/220/230/240 VAC (Ph-N)		3 x 360*/380/400/415 VAC (3Ph+N)			
AC Voltage Regulation (Batt. Mode)				± 1%					
Frequency Range (Synchronized Range)				46~54Hz or 56~64Hz					
Frequency Range (Batt. Mode)				50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz					
Current Crest Ratio				3:1 (max.)					
Harmonic Distortion		≤ 2 % @100% Linear Load ≤ 5 % @100% Non-linear Load			≤ 2 % THD @100% Linear Load ≤ 5 % THD @100% Non-linear Load				
Transfer Time	AC Mode to Batt. Mode			Zero					
	Inverter to Bypass			Zero					
Waveform (Batt. Mode)				Pure Sine wave					
Overload	AC Mode			100-110% for 60 min, 110-125% for 10 min, 125%~150% for 1min, >150% immediately					
	Battery Mode			100-110% for 60 min, 110-125% for 10 min, 125%~150% for 1min, >150% immediately					
EFFICIENCY									
AC Mode				95.5%					
ECO Mode				98.5%					
Battery Mode				94.5%					
BATTERY									
Long-run Model	Battery Type			Depending on the capacity of external batteries					
	Numbers	20 PCS	32~40 pcs (Adjustable)	20 PCS	32 ~ 40 PCS				
	Charging Current (max.)	1.0~12.0A ± 10% (Adjustable)	2.0~24.0A ± 10% (Adjustable)	1A ~ 12A (Adjustable)					
	Charging Voltage	+/-13.65 VDC* N ± 1% (N = 10)	+/-13.65 VDC* N ± 1% (N = 16~20)	+/-136.5 VDC ± 10%		+/-13.65V*N (N=16~20)			
Standard Model	Numbers	20 PCS			40 PCS				
	Charging Current(max.)	2A ± 10%			2A ± 10%				
	Charging Voltage	+/-136.5 VDC ± 10%			+/-218 VDC				
INDICATORS									
LCD Display				UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions					
PHYSICAL									
Long-run Model	Dimension, D x W x H (mm)	626 x 250 x 827			630 x 250 x 826		815 x 300 x 1000		
	Net Weight (kgs)	46,5	46,5	28	43	60	67		
ENVIRONMENT									
Operation Temperture				0-40°C					
Operation Humidity				< 95% and non-condensing					
Noise Level		Less than 55dB @ 1 Meter			Less than 58dB @ 1 Meter		Less than 70dB @ 1 Meter		
MANAGEMENT									
Smart RS-232 / USB				Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC					
Optional SNMP				Power management from SNMP manager and web browser					

*If output voltage is set as 3 x 360VAC, the output power of the unit will be de-rated to 90%.
Product specifications are subject to change without further notice.



Backup Time Table for EPOS Series

BATTERY BANK		Backup Time Table (min)			
		25%	50%	75%	100%
EPOS 3/1 10KL	+1BB+120V 18Ah (12V-9Ah x 40)	49.8	22.3	13.2	9.0
EPOS 3/3 10KL	+2BB+120V 18Ah	110	50.5	30.3	22.0
EPOS 3/1 20KL	+1BB+240V 18Ah (12V-9Ah x 80)	49.3	21.9	13.3	9.5
EPOS 3/3 20KL	+2BB+240V 18Ah	109	49.9	30.9	22.8
EPOS 3/3 30KL	+1BB+240V 18Ah (12V-9Ah x 80)	29.9	13.1	7.7	5.1
	+2BB+240V 18Ah	69.0	30.4	18.9	13.5
EPOS 3/3 40KL	+1BB+240V 18Ah (12V-9Ah x 80)	21.5	9.1	4.9	3.1
	+2BB+240V 18Ah	49.3	21.9	13.3	9.4

MODEL		EPOS 3/3 60KL	EPOS 3/3 80KL	EPOS 3/3 100KL	EPOS 3/3 120KL	EPOS 3/3 160KL	EPOS 3/3 200KL	
PHASE		3-phase in/3-phase out with Netural						
CAPACITY		60kVA / 60kW	80kVA / 80kW	100KVA / 90KW	120KVA / 108KW	160KVA / 144KW	200KVA / 180KW	
PARALLEL CAPABILITY		3			2			
INPUT								
Nominal Voltage		3 x 400 VAC (3Ph+N)						
Voltage Range		190-520 VAC @ 50% load 305-478 VAC @ 100% load			208-478 VAC(3-phase) @ 50% load 305-478 VAC(3-phase) @ 100% load			
Frequency Range		46~54Hz or 56~64Hz			40~70Hz			
Power Factor		≥ 0.99 @ 100% load						
OUTPUT								
Output Voltage		3 x 360*/380/400/415 VAC (3Ph+N)			3 x 380*/400/415 VAC (3Ph+N)			
AC Voltage Regulation (Batt. Mode)		± 1%						
Frequency Range (Synchronized Range)		46~54Hz or 56~64Hz						
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz						
Current Crest Ratio		3:1 (max.)						
Harmonic Distortion		≥ 2 % @100% Linear Load; ≥ 5 % @100% Non-linear Load			≥ 2 % THD @100% Linear Load; ≥ 4 % THD @100% Non-linear Load			
Transfer Time	AC Mode to Batt. Mode	Zero						
	Inverter to Bypass	Zero						
Waveform (Batt. Mode)		Pure Sine wave						
Overload	AC Mode	100-110% for 60 min, 110-125% for 10 min, 125%~150% for 1min, >150% immediately			105-110% for 60 min, 111-125% for 10 min, 126%~150% for 1min, >150% immediately			
	Battery Mode	100-110% for 60 min, 110-125% for 10 min, 125%~150% for 1min, >150% immediately			105-110% for 60 min, 111-125% for 10 min, 126%~150% for 1min, >150% immediately			
EFFICIENCY								
AC Mode		95.5%			94%			
ECO Mode		98.5%			98.5%			
Battery Mode		94.5%			93.0%			
BATTERY								
Long-run Model	Battery Type	Depending on the capacity of external batteries						
	Numbers	32 ~ 40 PCS						
	Charging Current (max.)	2.0~24.0A (Adjustable)			24A	32A	40A	48A
	Charging Voltage	+/-13.65 VDC* N ± 1% (N = 10)			+/-13.7V*N (N=16~20)			
INDICATORS								
LCD Display		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions						
PHYSICAL								
Long-run Model	Dimension, D x W x H (mm)	790 x 360 x 1010			940 x 567 x 1015		1040 x 567 x 1452	
	Net Weight (kgs)	108	113	194	229	306	340	
ENVIRONMENT								
Operation Temperture		0-40°C						
Operation Humidity		< 95% and non-condersing						
Noise Level		Less than 70dB @ 1 Meter		Less than 70dB @ 1 Meter		Less than 73dB @ 1 Meter		
MANAGEMENT								
Smart RS-232 / USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC						
Optional SNMP		Power management from SNMP manager and web browser						

*If output voltage is set as 3 x 360VAC, the output power of the unit will be de-rated to 90%.
Product specifications are subject to change without further notice.



Premium featured MODULAR UPS

XMOD 10KVA-60KVA

XMOD series modular UPS is standard 19" modular, scalable, hot-swappable, online double conversion UPS ranging from 10-60kVA with flexible configuration of 3/3, 3/1 and 1/1, the compact and high-power density structure is convenient to integrate with ICT equipment to be the ideal choice for small and medium data center.

The PM10X Power Module is based on a 2U height 10kVA/kW design which can be inserted into the frame of 20, 40, 60kVA max power capacity with the setting of N+1 and N+X power redundancy. More than that, the modules will be standby or off to save energy while load percent is low. The function of parallel up to 4 units makes the power safety more resilient.



Data Center



Higher load
power capacity



High Efficiency 99%



Emergency
Power Backup

Lowest TCO design, from installation to maintenance, the XMOD series modular UPS is equipped with different features to support owner spending lower cost. The compact and standard 2U design uses smaller footprint and space. High efficiency up to 99% (ECO mode), unity power factor and smart sleep function saving the bill of electricity cost and control the expenditure in long-term.



MODULAR UPS | XMOD

10KVA-60KVA

GENERAL FEATURES

- Modular design, 19" standard rack cabinet
- Unity output power factor
- Modular design and parallel up to 4 units to lower MTTR
- High scalability
- High efficiency 99% ECO Mode
- N+1 or N+X Parallel Redundancy for power guarantee
- Ease of installation and maintenance
- 7" touch color LCD with graphic display
- Flexible battery configuration adapts to different applications
- High overload capability



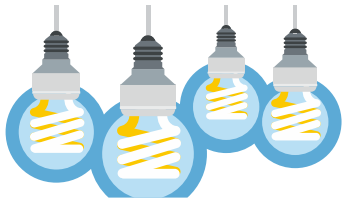
EAC CE

MODEL	XMOD 20KW	XMOD 40KW	XMOD 60KW
PHASE	1P/1P, 3P/1P, 3P/3P		
TOTAL CAPACITY*	20KW	40KW	60KW
UPS POWER MODULES	2	4	6
TOPOLOGY			
INPUT			
Input Voltage	380V/400V/415V(line to line), 220V/230V /240V(line to neutral)		
Input Frequency	50/60Hz		
Power Factor	>0.99		
Input Voltage Window	up 276Vac; down -40% (-20%,-30%, -40% selectable), -20%~-40% rated power derating from 100%~80%		
Frequency Window	40-70Hz		
Input Current (THDi)	< 4%		
OUTPUT			
Output Voltage	380V/400V/415V(line to line)		
Voltage Precision	1.5%		
Voltage THD(Total Harmonic Distortion)*	THD<1%(linear load),THD<5.5%(nonlinear load)		
Power Factor	1		
Phase Tolerance	120°±0.5° (balance and unbalance load)		
Crest Factor	3:1		
Overload Capability	<102%, long time		
	60mins for 110%, 10mins for 125%, 1min for 150%, and 200ms for >150%		
BYPASS			
Bypass Voltage	380V/400V/415V(line to line),220V/230V/240V(line to neutral)		
Bypass Voltage Window	-20%~+15% default -40%~+25% selectable		
	125%, long time operation		
Bypass Overload Capability	125%< load <130%, last for more than 10 mins 130%<load<150%,last for more than 1 min load>150%, last for more than 300ms		
EFFICIENCY			
System Efficiency*	Normal mode: 95%max, ECO mode: 99% -		
Battery Mode Efficiency*	94.5%		
ENVIRONMENT			
Operation Temperature	0-45°C		
Relative Humidity	0-95% (non-condensing)		
Noise(dB)(1m away from front panel)	56dB(one module)		
IP Class	IP20		
PHYSICAL			
Dimension(W*D*H)mm**	485*697*398(7U)	485*697*575(11U)	485*751*1033(21U)
Net/Package Weight(kg)	42/58	51/68	85/102
OTHERS			
Communication Ports	RS232,RS485,Dry contactor,SNMP card(optional),EPO,Parallel		
Safety	IEC EN 62040-1, IEC EN 62040-2, IEC EN 62040-3		

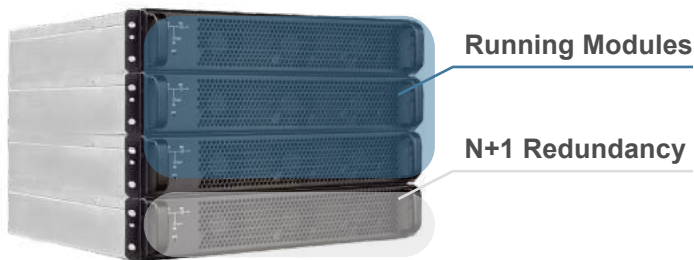
* Product specifications are subject to change without further notice.

MODULAR UPS | XMOD

10KVA-60KVA



ENERGY SAVING



High scalability

DSP control provides an improved solution with high performance. Integrated with modular design and parallel technology, XMOD simplifies future power expansion.

Ease of installation and maintenance

Built-in maintenance bypass assures continuous power to critical loads during UPS maintenance. Besides, to facilitate installation and maintenance, all panel control and connectors are front accessibility.

Flexible battery cabinet

The battery cabinet is 3U height with hot-swap function and 40 pieces 9Ah Battery inside which can be integrated with IT rack. It can also be expanded based on the number of power module (PM10X).

High efficiency online double conversion technology

XMOD is applied online double conversion technology with high performance 99% at ECO mode. It significantly reduces overall Total Cost of Ownership (TCO).

N+1 or N+X parallel redundancy for power guarantee

Scalable architecture allows you to optimize cost expense to meet power demands by vertically expanding in a single rack enclosure from 10kVA to 60kVA and achieve N+1 or N+X redundancy in the same rack.

Modular design lowers MTTR

Modular design is applied in power module, STS module and battery module. It will simplify maintenance and replacement with low MTTR (Mean Time To Repair).



Dimensions



XMOD 20KW



XMOD 40KW



XMOD 60KW