

## MSI Series

1~10KVA

### Application:

PC, Servers, Networking Equipments,  
Security Systems, Medical Equipments etc.



Control LCD Panel

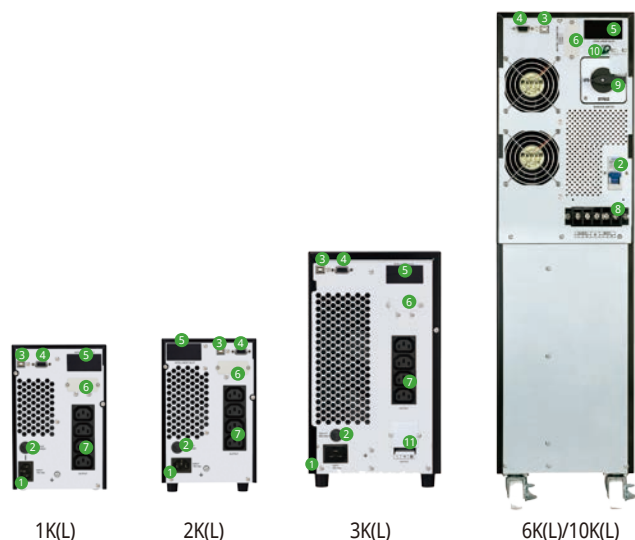


### Features:

- True double-conversion
- Output power factor 0.9
- Wide input voltage (110 V – 300 V)
- Converter mode available
- ECO mode for energy saving (Only available for 1-3KVA)
- Generator compatible
- Adjustable battery number only available for 6K/10K models
- Smart SNMP works well with either USB or RS-232 together
- Emergency power off function (EPO) only available for 6K/10K models
- Adjustable charging current via LCD or software (1A~6A) only available for 6K/10K models
- Optional 1KL-12V, 12A charger available.  
(Please check sales directly)

### Rear Panel

1. AC input
2. Input circuit breaker
3. USB communication port
4. RS-232 communication port
5. SNMP intelligent slot
6. External battery connection (only available for L model)
7. Output receptacles
8. Input/Output terminal
9. Maintenance bypass switch (Only for 6K/10K model)
10. Emergency power off function connector (EPO connector)
11. Output terminal



1K(L)

2K(L)

3K(L)

6K(L)/10K(L)

## ▶ Technical Specifications of MSI Series 1~10KVA

STANDARD MODEL	MSI1101B2	MSI1102B4	MSI1103B6	MSI1106B16	MSI1110B16	
LONG-RUN MODEL	MSI1101L3	MSI1102L6	MSI1103L6	MSI1106L16	MSI1110L16	
PHASE	Single phase with ground					
CAPACITY *	1000 VA / 900 W	2000 VA / 1800 W	3000 VA / 2700 W	6000VA / 5400W	10000 VA / 9000 W	
<b>INPUT</b>						
Nominal Voltage	100/110/115/120/127VAC or 200/208/220/230/240VAC			208/220/230/240VAC		
Input Voltage Range	55-150 VAC or 110-300 VAC (Based on load at 50%) 85-140VAC or 160-280VAC (Based on load at 100%)			110-300 VAC (Based on load at 50%) 176-300 VAC (Based on load at 100%)		
Frequency Range	40 Hz ~ 70 Hz			46-54 Hz or 56-64 Hz		
Power Factor	≥ 0.99 @ Nominall Voltage (100% load)					
<b>OUTPUT</b>						
Output Voltage	100/110/115/120/127VAC or 200/208/220/230/240VAC			208/220/230/240VAC		
Voltage Regulation	± 1 %					
Frequency Range (Synchronized Range)	47~ 53 Hz or 57 ~ 63 Hz			46-54 Hz or 56-64 Hz		
Frequency Range (Batt. Mode)	50 Hz ± 0.25 Hz or 60Hz ± 0.3 Hz			50 Hz or 60Hz ± 0.1 Hz		
Current Crest Ratio	3:1					
Harmonic Distortion	≤ 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					
<b>EFFICIENCY</b>						
AC Mode	88%	89%	90%	92%	93%	
Battery Mode	83%	87%	88%	90%	91%	
<b>BATTERY</b>						
Standard Model	Battery Type	12V/9Ah	12V/9Ah	12V/9Ah	12V/9Ah	
	Numbers	2	4	6	16	16
	Typical Recharge Time	4 hours recover to 90% capacity			9 hours recover to 90% capacity	
	Charging Current (max.)	1 A			1 A / 2 A	
	Charging Voltage	27.4VDC ± 1%	54.7 VDC ±1%	82.1 VDC ±1%	218.4 VDC±1%	218.4 VDC±1%
Long-run Model **	Battery Type	Depending on the capacity of external batteries				
	Numbers	3	6	6	16 ~ 20 (Adjustable)	
	Charging Current (max.)	1A/2A/4A/6A (Adjustable)			1A/2A/4A/6A (Adjustable, 6A is only available for 16pcs batteries)	
	Charging Voltage	41.0VDC ± 1%	82.1VDC±1%	82.1 VDC ±1%	273 VDC ±1% (Based on 20pcs batteries)	
<b>INDICATORS</b>						
LCD	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators					
<b>ALARM</b>						
Battery Mode	Sounding every 4 seconds					
Low Battery	Sounding every second					
Overload	Sounding twice every second					
Fault	Continuously sounding					
<b>PHYSICAL</b>						
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		369 x 190 x 318	442 x 190 x 318
	Net Weight (kgs)	4.1	6.8	7.4	12	16
<b>ENVIRONMENT</b>						
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 50dB @ 1 Meter			Less than 55dB @ 1 Meter	Less than 58dB @ 1 Meter	
<b>MANAGEMENT</b>						
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					

\*1-3KVA: Derate to 80% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 100/200/208VAC.

\*6-10KVA: Derate to 60% of capacity in Frequency converter mode and to 90% when the output voltage is adjusted to 208VAC.

\*\*Long-run model is only available for 200/208/220/230/240VAC systems (200VAC system only available for 1-3KVA).

Product specifications are subject to change without further notice.

## ▶ Technical Specifications of Battery Pack

MODEL	BPMSI01K6N9	BPMSI0203K12N9	BPMSI0203K18N9
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Supported UPS	1K	3K	3K
Battery Type	12 V/9 Ah	12 V/9 Ah	12 V/9 Ah
Battery Number	6 pcs	12 pcs	18 pcs
Battery Voltage	24VDC	72 VDC	72 VDC
Dimension(DxWxH)	397 X 145 X 220	421 X 190 X 318	535 X 190 X 318
Net Weight (kgs)	20	40	67.5

MODEL	BPMSI0610K16N9	BPMSI0610K32N9	BPMSI0610K40N9
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Supported UPS	6K	6K	10K
Battery Type	12 V/9 Ah	12 V/9 Ah	12 V/9 Ah
Battery Number	16 pcs	32 pcs	40 pcs
Battery Voltage	192VDC	192VDC	240 VDC
Dimension(DxWxH)	442 x 190 x 318	442 x 190 x 688	442 x 190 x 688
Net Weight (kgs)	20	40	40