

MPOWER UPS



DSP MULTIPOWER CONVERTIBLE SERIES

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10 years of uninterruptible power

DSP MULTIPOWER CONVERTIBLE SERIES

On-Line Double Conversion Technology. 1 Phase in / 1 Phase out from 5kVA to 10kVA, 3 Phase in / 1 Phase out from 10 to 20kVA (Tower & Rack Convertible)

- On-line double conversion technology
- Real Digital Signal Processor (DSP) Controller
- Parallel redundant operation up to 4 units
- Input Power Factor Correction PFC
- High output power factor (PF:0.9)
- Low total harmonic distortion (THD) level
- Convertible display for both tower and rack applications
- Transformerless Design
- Configurable as a 50/60Hz Frequency Converter from the LCD Panel
- High Performance with PWM Sinewave Topology
- Cold Start Function
- Intelligent Battery Management System extends the life time of batteries
- Overload, Overheat & Short Circuit Protection
- User Friendly, Multi-Functional LED/LCD Display Panel
- Energy Saving Mode (ECOMODE)
- Smart Fan Speed Regulation with temperature control
- RS232 Communication Port & Management Software
- Internal SNMP, RELAY contact, RS485 card options



General Characteristics

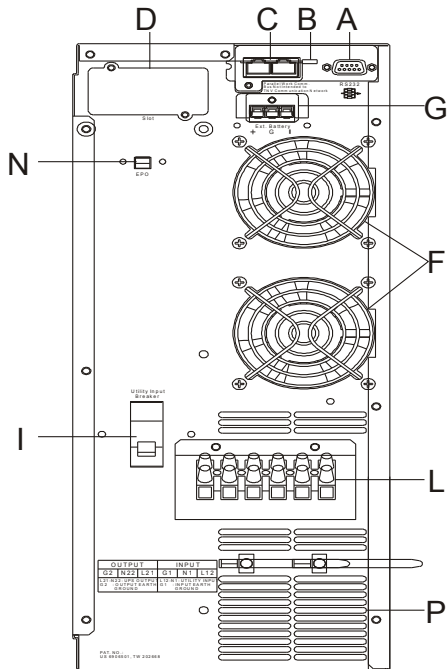
The true online architecture continuously supplies your critical device with stable, regulated, transient-free pure sine wave AC Power. The multi-functional LCD/LED panel displays working status, Utility Status, Fault status, Input/Output Voltage, Frequency, Load Status and Inner cabinet temperature.

Providing four different working modes, Normal, ECO, CF50 and CF60, this UPS can be used in a whole range of applications. The revolutionary battery management circuit analyzes the battery discharging status, adjusts the battery cut-off point when running on battery, therefore extending the life of batteries.

The Intelligent temperature-controlled fan not only extends the life of the fan, but also reduces noise in an office environment.

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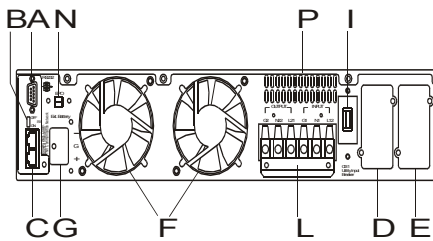
5K/6K with battery Model



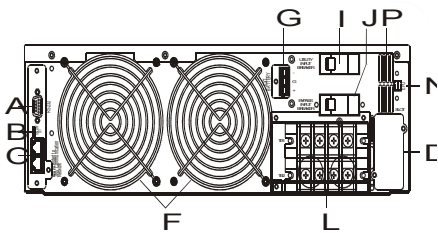
Rear Panel

- A** RS232 Port
- B** Terminal Resistor for Parallel function
- C** CAN Bus Connection Port for Parallel System
- D** Customer Options Slot 1
- E** Customer Options Slot 2
- F** Cooling Fan
- G** External Battery Connector
- I** Utility Input Breaker CB1
- J** Bypass Input Breaker CB2 (for Dual Input Model Only)
- K** CAM Switch (Maintenance Bypass Switch) *
- L** Input/Output Terminal Block
- N** EPO (Emergency Power Off): Short to enable the function
- P** Air Ventilation Hole

5/6k PowerModule



10K PowerModule



Specification

MODEL	DSPMP-1105	DSPMP-1106	DSPMP-1110	DSPMP-3110	DSPMP-3115	DSPMP-3120
Power (kVA)	5	6	10	10	15	20
Power (kW)	4.5	5.4	9	9	13.5	18
INPUT						
Phase Configuration	1Ph + N + PE (Hardwire)			3Ph + N + PE (Hardwire)		
Nominal Voltage	220VAC/230VAC/240VAC			380VAC/400VAC/415VAC		
Minimum Voltage (at Half load)	160VAC			277VAC		
Minimum Voltage (at Full load)	180VAC			312VAC		
Maximum Voltage	280VAC			485VAC		
Frequency	45-65 Hz					
Power Factor	0.99			0.95		
OUTPUT						
Power Factor	0.9					
Phase Configuration	1Ph + N + PE (Hardwire)					
Nominal Voltage	220VAC / 230VAC / 240VAC					
Wave Form	Pure Sine Wave					
Total Harmonic Distortion at 100% linear load	<3%					
at 100% non-linear load	<5%					
Frequency	50Hz or 60Hz (adjustable)					
Frequency Tolerance (free running)	±0,1 %					
Frequency Synchronized Range	±1Hz or ±3Hz (selectable)					
Static Voltage Regulation (0%-100% load)	<1%					
Crest Factor	3					
Transfer Time	0sec					
Overload	Up to 10min. @100%-120%					
	Up to 1min. @120%-150%					
	Transfer to bypass @ >150%					
Total Efficiency	up to 90%		up to 91%		up to 93%	
Greenmode Efficiency	≥97%					
Outlets	Additional external socket boxes available					
BATTERY						
Type	Maintenance-free lead acid batteries					
Recharge Time	4-6h up to 90%					
Voltage	240VDC					192VDC for 16 pcs 240VDC for 20 pcs
Quantity per string				20 pcs 12V Batteries		
Internal batteries	20 pcs 12V 4.5Ah (internal battery version only)				N/A	
Built in max. charge current	1.6A					4A
Cold Start	Yes					
DISPLAY						
LED + LCD Display	Line Mode, Backup Mode, ECO Mode, Bypass Supply, Battery Low, Battery Fail/Disconnected, Overload, Transferring with Interruption and UPS Fault					
LCD display	Input Voltage, Input Frequency, Output Voltage, Output Current, Output Frequency, Load Percentage, Battery Voltage & Internal Temperature.					
Self Diagnostics	Power on self test and continuous self diagnostics					
Audible and Visual Alarms	Line Failure, Battery Low, Transfer to Bypass, System Fault Conditions					
PROTECTION						
Overload Protection	Transfers to bypass on overload					
Short Circuit Protection	Current limits and internal fuses					
COMMUNICATION						
Interface (Communication ports)	Standard RS232 port and optional RS485, Internal SNMP, Volt free relay contact Card					
Monitoring and Management Software	Supplied with UPS as standard					
ENVIRONMENT						
Operating Temperature	0°C - 40°C					
Proposed Temp. to extend battery life	20°C - 25°C					
Humidity	up to 90% (non-condensing)					
Audible Noise at 1 m	<50 dB			<60 dB		
Protection Class	IP20					
PHYSICAL SPECIFICATIONS (tower position)						
Net Weight (power module)	25kg		26kg		28kg	
Net Weight (with internal batteries)	53kg		N/A		N/A	
Dimensions(mm) (HxWxD)-power module	440x88x680		440x132x680		440x220x720	
Dimensions(mm) (HxWxD)- w/battery vers.	440x176x680		N/A		N/A	
STANDARDS						
Standards	EN62040-1-1 (Safety); EN62040-2 (EMC); EN62040-3 (Performance); EN60950-1					
ACCESSORIES						
Optional	Internal&External SNMP, Relay Contact Board, External Manual Bypass, Rail Kit, External Battery Connection Cable, External Socket Box, External Additional Charging Board					

