DSP Multipower Convertible

1 Phase In - 1 Phase Out / 5kVA – 10kVA
3 Phase In - 1 Phase Out / 10kVA – 20kVA

- 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 helps to use both for tower and rack applications
- Transformerless Design
- Availability to configure as 50/60Hz Frequency Converter from LCD Panel
- High Performance with the PWM Sinewave Topology
- Cold Start Function
- Intelligent Battery Management System extends the life time of batteries
- Overload, Overheat & Short Circuit Protections
- User Friendly Multi-Functional LED/LCD Display Panel
- Energy Saving Mode (ECOMODE)
- Smart Fan Speed Regulation with temperature controlled
- RS232 Communication Port & Management Software
- Internal SNMP, DRY contact, RS485 card options

VFI TYPE UPS ONLINE | TOWER | RACK | LCD DISPLAY (5-20kVA) | SERVICE

TECHNICAL SPECIFICATIONS

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; ±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	External Socket Box (2 pcs SCHUKO, 4 pcs IEC C13 Outlets) Optional					
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				(20 pcs 12V Batteries) or (16 pcs 12V Batteries)**	
Internal batteries	20 pcs 12V 4.5Ah (internal battery version only)		20 pcs 7Ah / 9Ah		N/A	
Built in max. Charge Current	1.6A				4A	
Cold Start	Present					
DISPLAY						
LED + LCD Display	Line Mode, Backup Mode, ECO Mode, Bypass Supply, Battery Low, Battery Bad/Disconnect, Overload and Transferring with Interruption & UPS Fault					
LCD display	Input Voltage, Input Frequency, Output Voltage, Output Current, Output Frequency, Load Percentage, Battery Voltage & Inner Temperature.					
Self Diagnostics	Upon Power-on, Front Panel Setting & Software Control, 24-hour routine checking					
Audible and Visual Alarms	Line Failure, Battery Low, Transfer to Bypass, System Fault Conditions					
PROTECTION						
Overload Protection	Bypass transfer time is calculated by simulating a temperature related model of a fuse					
Short Circuit Protection	Acts as the ideal current source during the short circuit time					
Other Protection	Against excessive (heat,voltage,current) intense battery discharge					
COMMUNICATION						
Interface (Communication ports)	Standard RS232 port and optional RS485, Internal SNMP, Dry Contact Cards					
ENVIRONMENT						
Operating Temperature	0 °C.... + 40 °C					
Proposed Temp. to extend battery life	20 - 25 °C					
Humidity	up to 95% (non-condensing)					
Audible Noise at 1 m	<50 dB				<60 dB	
Protection Class	IP 20					
PHYSICAL SPECIFICATIONS (tower position)						
Net Weight (power module)	25kg		26kg	28kg	36 kg	
Net Weight (with internal batteries)	55kg		85kg with 9Ah battery	-	-	
Dimensions(mm) (HxWxD)-power module	440x88x680		440x132x680		440x220x720	
Dimensions(mm) (HxWxD)- w/battery vers.	440x176x680		-		-	
STANDARDS						
Standards	EN62040-1-1 (safety); EN62040-2 (EMC);EN62040-3(performance); EN60950-1					
ACCESSORIES						
	Internal&External SNMP, Dry Contact Board, External Manual Bypass, Rail Kit, External Battery Connection Cable, External Socket Box, External Additional Charging Board Software					

** Availability to use 16pcs 12V batteries per string if load is less than 85%