

ON LINE UPS

Perfect solution for
Commercial and
Industrial Users.



Vanguard UPS

Multi Functional double conversion LCD On-Line UPS

As business becomes increasingly dependent on technology for their fundamental operation, the need for system available is of paramount importance. The Powercom Vanguard series UPS is designed for those applications that need maximum protection. With its high-frequency, double-conversion online topology, providing nonstop clean sine wave power; advanced communications and space-saving tower design, the Powercom Vanguard series is the ideal power solution for networks, web servers, telecommunications applications and other critical electronic equipment.

- True on-line technology provides all power protection
- Pure sine-wave output with less than 3% THD
- Fully digitalized microprocessor controlled
- Cold start function (DC power on)
- Lightning and surge protection
- Short Circuit and overload protection
- Enhanced battery management (EBM)
- Automatic battery charge in UPS off mode
- Battery replacement warning
- Automatic diagnostics & battery check
- RS-232 communication port with monitoring software
- Load segmentation receptacles controllable *
- Fan Speed auto control when loads varies
- Extended back up time with battery pack
- Network/fax/modem surge protection

- UPSMON plus software monitoring
 - Hot swappable battery by user*
 - Emergency Power Off function
 - Support USB communication
 - High efficiency mode selectable
 - Battery remain time display
 - Multiple language LCD display
 - Selectable on line output voltage
 - LCD display front panel
 - Power factor correction
- * Only available for models VGD-700~3000



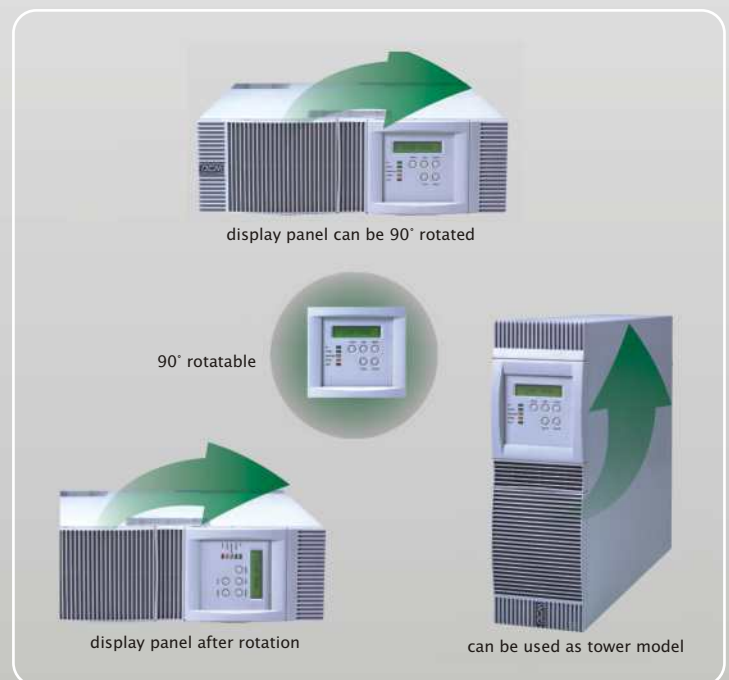
VGD-700~3000



1K~3KVA(2U)



6K~10KVA(3U+3U)



display panel can be 90° rotated

90° rotatable

display panel after rotation

can be used as tower model

Specification

MODEL		MSD 700	MSD 1000	MSD 1500	MSD 2000	MSD 3000	MSD 700	MSD 1000	MSD 1500	MSD 2000	MSD 3000	MSD 6000	MSD 10K	
CAPACITY	FORM FACTOR	TOWER MODELS					RACKMOUNT MODELS					RACK / TOWER MODELS		
	Capacity (VA)	700VA	1000VA	1500VA	2000VA	3000VA	700VA	1000VA	1500VA	2000VA	3000VA	6000VA	10000VA	
	Capacity (W)	490W	700W	1050W	1400W	2100W	490W	700W	1050W	1400W	2100W	4200W	7000W	
INPUT	Voltage / Load	208V, 220V, 230V, 240V												
		Voltage / Range						Load Capacity						
		120 ~ 139V						0 ~ 40%						
		140 ~ 159V						0 ~ 70%						
	160 ~ 276V						0 ~ 100%							
Frequency	50Hz Auto Sensing													
OUTPUT	Voltage (on battery)	208V, 220V, 230V, 240V +/- 2% (Selectable Output Voltage) 110V available on request												
	Frequency (on battery)	50Hz +/-0.5%												
	Transfer Time	0 ms												
	Overload Recovery	Auto transfer to UPS												
	High Efficiency mode	> 95 %												
	(AC to AC)													
	UPS Design Technology	O-Line / Fully digitalized microprocessor controlled												
	Output Wave Form	Sinewave												
	Harmonic distortion	<3% of T.H.D. at liner load												
	Crest Factor	3 : 1												
PROTECTION and FILTERING	Surge Protection	120V (IEEE C62.41) / 230V (IEEEC61000-4-5 level 3)												
	Overload Protection	125% for 1 minutes and 150% for 10 seconds												
	Short Circuit Protection	UPS output cut off immediately or input fuse / circuit breaker protection												
SYSTEM DISPLAY WARNING	Visual Display (LED Indicators)	UPS on(green), line-mode(green), battery mode(yellow), bypass(yellow), fault(red)												
	Visual Display (LCD Indicators)	Input / output voltage input / output frequency, on-line mode, back up mode, battery capacity, load level												
	Audible Alarm (Battery back-up)	Beep every 5 sec												
	UPS Fault	Continuous beeping sound and LCD display												
	Communication	RS-232 Serial Port and USB												
BATTERY	Type	Sealed, maintenance-free lead acid batteries												
	Typical Recharge Time to 90% Full	3 hours												
	Management	Self-test, adjustable battery transfer points and alarm settings												
	Battery Protection	Cut off without draining any current when battery is low												
	Cold Start (DC start)	YES												
	Back Up Time (Full Load)	6 min	6 min	4 min	6 min	4 min	6 min	6 min	46 min	6 min	4 min	7 min	4 min	
	Back Up Time (Half Load)	15 min	15 min	10 min	15 min	10 min	15 min	15 min	10 min	15 min	10 min	20 min	10 min	
PHYSICAL	Input Inlet	IEC 320 (230V)					NEMA 5-15 (120V) / IEC 320 (230V)							
	Receptacles	IEC 320 (230V)					NEMA 5-15 (120V) / IEC 320 (230V)							
	Total Receptacles (UPS+Surge / Surge Only)	4 (230V)			8 (230V)		4 (230V)			4 (230V)		Hardwire		
	Dimensions Inches mm													
	W x D x H	152 x 420 x 237					225 x 420 x 360		428 x 425 x 84			428 x 635 x 84		
	Power Module											428 x 597		
	Battery Module											x 130		
	Net Weight kg	13.9	17.1	17.7	33.8	35.6	15.4	18.7	19.1	33.6	34.3			
	Power Module											20.0		
Battery Module											66.0			
ENVIRONMENT	Operating Temperature	0 - 40°C / 32 ~ 104°F												
	Store Temperature	-20 ~ 50°C / -4 ~ 122°F												
	Altitude	3,500 meters max												
	Audible Noise (1 meter from surface)	< 40 dBA												
	Relative Humidity													
CONFORMANCE	Safety	0~ 95% humidity, non-condensing												
	EMC (EMS / EMI)	UL 1778, CE												
	Equipment Protection Policy	IEC 61000-4, FCC Part 15, CISPR 22												
		2 Year Warranty												