

- True on-line technology provides all power protection
- Pure sine-wave output with less than 3% THD
- Fully digitized microprocessor controlled
- Cold start function (DC power on)
- Lightning and surge protection
- Short Circuit and overload protection
- Advanced battery management (ABM)
- Automatic battery charge in UPS off mode
- Battery replacement warning
- Automatic diagnostics & battery check
- Schedule shutdown & reboot
- 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
- History record of power failure events
- UPSMON plus software monitoring
- Hot swappable battery by user *
- Emergency Power Off function
- Optional Extension battery pack
- Support USB communication
- High efficiency mode selectable
- Battery remain time display
- Multiple language LCD display
- On line output voltage selected
- LCD display front panel
- Optional SNMP Card slot
- Wide input voltage range
- Power factor correction
- Manual bypass setting
- Free run mode setting
- EMI/RFI noise filter

* means function available only
for model VGD-700~3000



Remote Panel



VGD-700~1500VA

VGD-2K~3K VA

PRODUCT INTRODUCTION :

As business become increasingly dependent on technology for their fundamental operation, the need for system availability is of paramount importance. The Powercom Vanguard series UPS is designed for those applications that need maximum protection in the 700VA - 20KVA range. 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.

In addition to its proven design, the Powercom Vanguard series offer Advanced Battery Management (ABM) and sophisticated communications to provide maximum system availability. ABM uses a three-stage charging technique that not only doubles service life of battery but optimizes charging time.

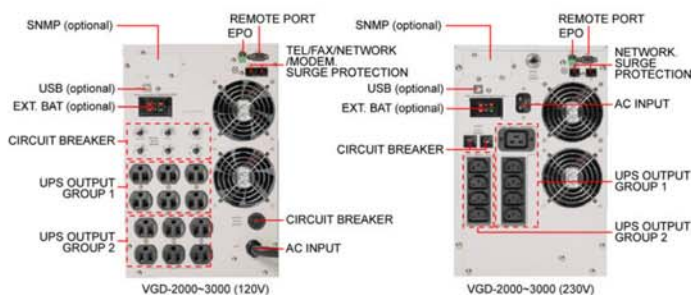
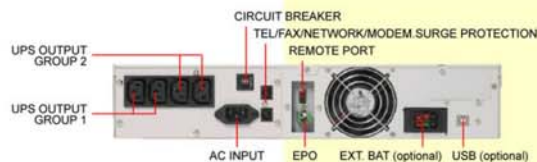
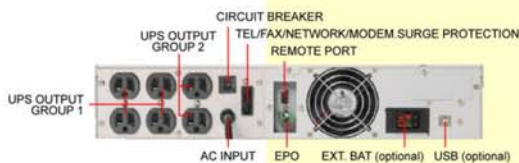
The Powercom Vanguard series's communications are flexible, allowing for local, network or remote monitoring and management. The Powercom Vanguard includes the latest version of Powercom's UPSMON Software Suite, which provides power monitoring and shutdown software.

With the Powercom Vanguard, Powercom delivers a best-in-class power solution for maximum system availability, and peace of mind.

FUNCTION :

Application:

Workgroup Server, Departmental Server, Enterprise Server, WEB server, Workstation.



700~3KVA (2U)



700~1KVA (1U)

Problems:

Power Failures, Power sags, Power Surges, Under-voltage Electrical Line Noise, Over-Voltage, Frequency Variation, Switching Transient, Harmonic Distortion. Even when presented with the most severe of these power problems, the Powercom Vanguard series output remains within a remarkable +/-2% of nominal voltage. It means that your critical system always receives steady and clean power. In addition, the Powercom Vanguard series transfer to backup mode with no break in power, making it the perfect UPS for equipment in environment plagued by poor power.

SPECIAL FEATURES :

1. 15 LCD Display:

Easy viewing of UPS status from LCD panel including:

O/P Voltage	O/P Load (%)	Battery Charge (%)
O/P Frequency	O/P Watt (W)	Temperature (°C)
I/P Voltage	O/P VA	Battery Pack Number
I/P Frequency	O/P Currency (A)	Rating (VA)
Battery Voltage	Back Up Time (Min.)	CPU Version

2. 14 UPS parameter settings:

O/P Voltage Set	Manual Bypass	Site Failure Set
I/P Frequency Set	Outlet Segment Set	Language Selection
I/P Bypass Set	Battery Test	Generator Option Set
Free Run Set	Silence Mode Set	RS232 Control
High Efficiency Mode	Battery Cabinet Set	

3. SNMP Control Card (option)

4. Extended Battery Pack (EBP) (option)

5. USB port (option)

Connecting the UPS to your computer is accomplished through the USB port on the back of your computer. USB compliant hardware and operating system will be necessary including installation of a UPS driver. The serial port cannot be used when using the USB port. The USB cable is standard and can be bought separately.

6. EPO port (emergency power off)

A customer-supplied switch located remotely can be used to open the EPO connection and allows UPS output receptacles to be switched off. Since the EPO shuts down the equipment immediately, orderly shutdown procedures are not followed and not by any power management software. The UPS will have to be manually restarted in order to regain power to the outlets.



Transient protector isolates your modem, fax machine, and other electronic equipment from "back door" power surges.

7. Network Transient protector (700 - 3000 VA)

The network transient protector, located on the back panel, has both IN and OUT jacks, and houses a single RJ-45 (10BaseT) network connector. Connect the input connector to the jack labeled IN, and the output connector to the jack labeled OUT.

8. Load segments (700 - 3000 VA)

The power management software controls the sets of receptacles known as load segments which provides organized shutdown and startup of the equipment. Less critical equipment can be turned off during power outages saving battery power for critical loads. The power management software manual has more details regarding this.

The load group status can be viewed from the LCD display and can be changed if necessary. These load segments are usually handled with the UPS management software. Refer to chapter 5.2 regarding the two load segments that come with each model.

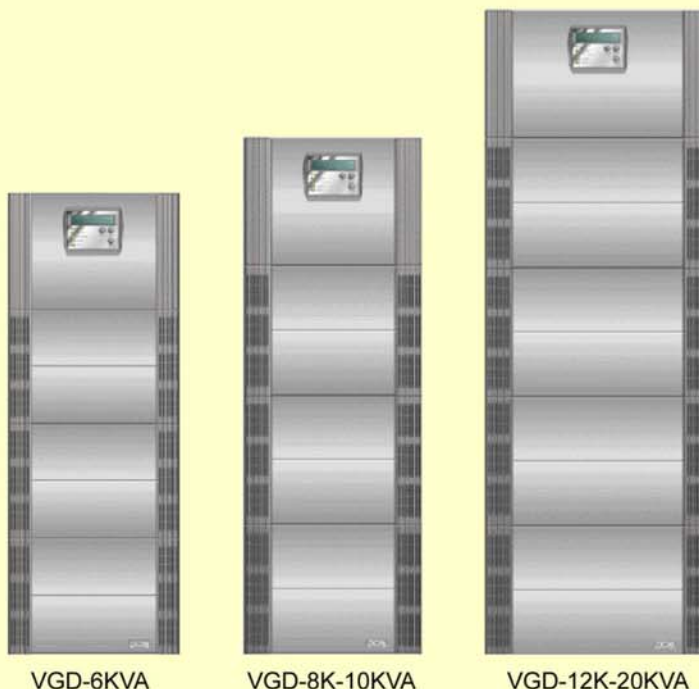
Software and Communications Options

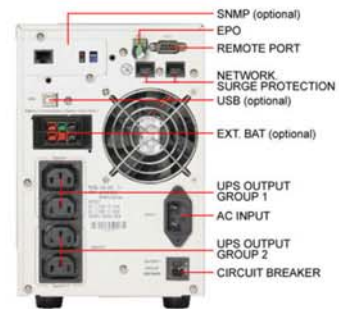
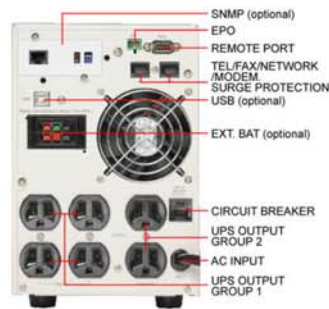
- * USB port (optional) allows UPS to communicate with Windows 98/ME, and XP computers
- * RS232 Port (standard) for interface with power management software
- * SNMP/Web card (optional) adds direct control and monitoring capabilities in SNMP-based networks. Ability to monitor UPS status and meters through web browser interface.
- * Relay card (optional) adds integration to industrial environment and building management systems, shutdown for IBM AS/400.

Powercom UPSMON suite

The industry's most comprehensive software bundle, the Powercom Software Suite, is free and included with every Powercom Vanguard UPS.

- * UPSMON plus Wizard guides you through software selection and installation
- * UPSMON plus Features the following power management software:
 - Automatic shutdown.
 - User notification of power events.
 - UPS power events log.
 - Automatic reboot.
 - Broadcast power abnormal status.
 - Smart save file.
 - Scheduled system shutdown/reboot.
 - UPS Battery low warning.
 - Real-time graphical display.
 - Battery level display.
 - Power quality data log.
 - Printing power events list.
 - Graphic display by meter.
 - Support Windows NT Service and start UPS monitoring software before user log in under Windows 95/98/2000 /NT/ME/XP.





VGD-700-1500 (120V)

VGD-700-1500 (230V)

Specifications

Tower model (with LCD display)		VGD-700	VGD-1000	VGD-1500	VGD-2000	VGD-3000	
19" rack-mount model		VGD-700-RM	VGD-1000-RM	VGD-1500-RM	VGD-2000-RM	VGD-3000-RM	
INPUT	Capacity (VA)	700VA	1000VA	1500VA	2000VA	3000VA	
	Capacity (W)	490W	700W	1050W	1400W	2100W	
	Voltage / Load	100V, 110V, 115V, 120V, 127V		208V, 220V, 230V, 240V			
		Voltage / Range		Load Capacity	Voltage / Range		Load Capacity
		60 ~ 69V		0 ~ 40%	120 ~ 139V		0 ~ 40%
	70 ~ 79V		0 ~ 70%	140 ~ 159V		0 ~ 70%	
	80 ~ 144V		0 ~ 100%	160 ~ 276V		0 ~ 100%	
	Frequency	50 / 60 Hz Auto Sensing					
OUTPUT	Voltage (on battery)	100V, 110V, 115V, 120V, 127V / 208V, 220V, 230V, 240V +/-2% (Selectable Output Voltage)					
	Frequency (on battery)	50 / 60 Hz +/-0.5%					
	Transfer Time	0 ms					
	Overload Recovery	Auto transfer to UPS					
	High Efficiency mode (AC to AC)	> 95 %					
	UPS Design Technology	On-Line / Fully digitized microprocessor controlled					
	Output Wave Form	Sinewave					
	Harmonic distortion	< 3% of T.H.D. at linear 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 model)	UPS on(green), line-mode(green), battery mode(yellow), bypass(yellow), fault(red)					
	Visual Display (LCD model)	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					
BATTERY	Communication	RS-232 Serial Port and USB					
	Type	Sealed, maintenance-free lead acid batteries					
	DC Voltage (V) Battery (Tower)	24V / 12V7.2AH x 2	36V / 12V7.2AH x 3	36V / 12V9AH x 3	72V / 12V7.2AH x 6	72V / 12V9AH x 6	
	DC Voltage (V) Battery (1U)	None					
	DC Voltage (V) Battery (2U)	24V / 12V7.2AH x 2	36V / 12V7.2AH x 3	36V / 12V9AH x 3	72V / 12V7.2AH x 6	72V / 12V9AH x 6	
	Typical Recharge Time to 90% Full	4 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 (Tower model)	7 min	7 min	6 min	7 min	6 min	
Back Up Time (Full Load)	2U* = 7 min, 1U = 7 min	2U* = 7 min, 1U = 4 min	6 min	7 min	6 min		
Back Up Time (Half Load)	2U* = 15 min, 1U = 15 min	2U* = 15 min, 1U = 10 min	15 min	15 min	15 min		
PHYSICAL	Input Inlet	NEMA 5-15 (120V) / IEC 320 (230V)					
	Receptacles	NEMA 5-15 (120V) / IEC 320 (230V)					
	Total Receptacles (UPS+Surge / Surge Only)	6 (120V) 4 (230V)			12 (120V) 8 (230V)		
	Tower Dimensions Inches mm (inch) W x D x H	152 x 420 x 238 (6.0" x 16.5" x 9.4")			225 x 425 x 360 (8.9" x 16.7" x 14.2")		
	Net Weight kg (lb) Tower model	13.5 (29.7)	16.2 (35.6)	17.0 (37.4)	31.1 (68.4)	33.0 (72.6)	
	Shipping Weight kg (lb) Tower model	15.5 (34.1)	18.2 (40.0)	19.0 (41.8)	33.6 (73.9)	35.5 (78.1)	
	19" rack-mount Dimensions Inches mm (inch) W x D x H	428 x 525 x 44 (16.9" x 20.7" x 1.7") 1U			None		
	Net Weight kg (lb) 19" rack-mount	1U=15.5(34.1), 2U=14.6(32.1)	1U=15.5(34.1), 2U=17.1(37.6)	18.1 (39.8)	31.6 (69.5)	32.5 (71.5)	
	Shipping Weight kg (lb) 19" rack-mount	1U=17.5(38.5), 2U=16.4(36.1)	1U=17.5(38.5), 2U=19.3(42.5)	20.1 (44.2)	33.8 (74.4)	35.7 (78.5)	
	ENVIRONMENT	Operating Temperature	0 - 40 °C / 32 ~ 104 °F				
Storage Temperature		-20 ~ 50 °C / -4 ~ 122 °F					
Altitude		3,500 meters max					
Audible Noise (1 meter from surface)		< 40 dBA					
Relative Humidity		0 ~ 95% humidity, non-condensing					
CONFORMANCE	Safety	UL 1778, CE					
	EMC (EMS / EMI)	IEC 61000-4, FCC Part 15, CISPR 22					
	Warranty	2 years					
	Equipment Protection Policy	Warranty policy may vary depends on region					

* Back up time of 2U rack mount models are equivalent to Tower models.

Specifications

Tower model (with LCD display)		VGD-6000	VGD-8000	VGD-10000	VGD-12000	VGD-15000	VGD-20000	
INPUT	Capacity (VA)	6000VA	8000VA	10000VA	12000VA	15000VA	20000VA	
	Capacity (W)	4200W	5600W	7000W	8400W	10500W	14000W	
	Voltage / Load	208V, 220V, 230V, 240V						
		Voltage / Range	Load Capacity		Voltage / Range		Load Capacity	
		120 ~ 139V	0 ~ 25%		180 ~ 276V		0 ~ 100%	
		140 ~ 159V	0 ~ 40%					
160 ~ 179V	0 ~ 75%							
Frequency	50 / 60 Hz Auto Sensing							
OUTPUT	Voltage (on battery)	100V, 110V, 120V / 208V, 220V, 230V, 240V +/-2% (Selectable Output Voltage)						
	Frequency (on battery)	50 / 60 Hz +/-0.5%						
	Transfer Time	0 ms						
	Overload Recovery	Auto transfer to UPS						
	High Efficiency mode (AC to AC)	> 98 %						
	UPS Design Technology	On-Line / Fully digitized microprocessor controlled						
	Output Wave Form	Sinewave						
	Harmonic distortion	< 3% of T.H.D. at linear load						
	Crest Factor	3 : 1						
	PROTECTION AND FILTERING	Surge Protection	IEEE C61000-4-5 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 model)	UPS on(green), line-mode(green), battery mode(yellow), bypass(yellow), fault(red)						
	Visual Display (LCD model)	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						
	DC Voltage (V) Battery (Tower)	240V / 12V7.2AH x 20	240V / 12V9AH x 20	240V / 12V9AH x 20	240V / 12V9AH x 20	240V / 12V7.2AH x 40	240V / 12V9AH x 40	
	Typical Recharge Time to 90% Full Management	4 hours						
	Battery Protection	Self-test, adjustable battery transfer points and alarm settings						
	Cold Start (DC start)	Cut off without draining any current when battery is low						
	Back Up Time (Tower model)	YES						
PHYSICAL	Input Inlet	7 min Full load / 15min Half load						
	Receptacles	Hardwire						
	Tower Dimensions Inches mm (inch) W x D x H	TBD			TBD			
	Net Weight kg (lb)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Shipping Weight kg (lb)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	ENVIRONMENT	Operating Temperature	0 - 40 °C / 32 ~ 104 °F					
Storage Temperature		-20 ~ 50 °C / -4 ~ 122 °F						
Altitude		3,500 meters max						
Audible Noise (1 meter from surface)		< 55 dBA						
Relative Humidity		0 ~ 95% humidity, non-condensing						
CONFORMANCE	Safety	UL 1778, CE						
	EMC (EMS / EMI)	IEC 61000-4, FCC Part 15, CISPR 22						
	Warranty	2 years						
	Equipment Protection Policy	Warranty policy may vary depends on region						

UPSMON plus Power Management Software



DM-VDG700-3000-040128