

GD series (6/10/15KVA/20KVA/30KVA)

Content:

### **(1) Introduction**

GD series, Aiming at Power Grid environment and network system for their requirements of high reliability of power supply, are high-performance on-line sine-wave UPS, specially designed for network computer room, small smart devices and precision instruments of these systems such as Finance, Communications, Insurance, Transportation, Taxation, Military, Securities, Energy, Education, Government, Enterprise and so on, particularly applicable to very bad power grid environment. GD series are no doubt the best mate to guarantee the stability of a network system.

### **(2) GD Series Key Features and Benefits**

- ★ one phase in, one phase 110VAC out (custom100/120/127)
- ★ True on-line double conversion design to provide the best power quality
- ★ Advanced micro-processor control technology to enhance the availability and reliability of the system
- ★ SPWM technology, IGBT power modules and the output isolation transformers, to ensure the output from the power grid fluctuations and noise interference
- ★ Advanced technology of Lock-in synchronization and electronic static bypass-switch, to ensure the continuity of load power supply
- ★ Ultra-Wide Input voltage windows, thereby reducing the use frequency of the battery, effectively extending the service life of the battery
- ★ Ultra-Wide Input frequency windows for Generator compatible
- ★ Smart battery management technology to effectively protect the battery, extending the battery life
- ★ Parallelable current-equalizer charger, current imbalance  $\leq 3\%$ , to the maximum to satisfy the configuration requirements of the system
- ★ Perfect protection design to greatly ensure the stability and reliability of the system operation
- ★ Super cold-start capability, cold started available under full-loaded to meet the user's urgent requirements
- ★ Intelligent unattended design to meet the requirements of various occasions.
- ★ Friendly LCD panel indication design for easy-communication between UPS and user
- ★ Through the RS232 interface, the system's various parameters clearly displayed on the monitor; by setting, the computer directly controls many functions of the system
- ★ With external SNMP adapter, the system directly linked to the Internet, to provide real-time information of UPS and power; Through a variety of network management platforms for communication and management, the system instantly become a part of network

### **(3) GD Series Applications:**

- ★ ISP, network node & center, server group, industrial process control, routers, switches, office automation, computer equipment, precision instruments & equipment, and so on



**(4) GD Series Specifications:**

<b>Model</b>	GD6K	GD6KS	GD10K	GD10KS	GD15KS	GD20KS	GD30KS
Capacity	6KVA	6KVA	10KVA	10KVA	15KVA	20KVA	30KVA
<b>AC Input</b>							
Voltage	Single phase 160~275VAC						
Frequency	50(60) Hz $\pm$ 5%						
Max current	64A		120A		1		
<b>AC Output</b>							
Voltage	Single phase 80~138VAC						
Frequency	50(60) $\pm$ 5Hz						
Voltage range	$\pm$ 1%						
Frequency range	$\pm$ 0.5% (when mains supply failure)						
Wave form	SPWM pure sine wave						
Power factor	0.8(lag)						
THD	<3%(linear load)						

Transient response	Voltage change $\leq 4\%$ (100% load into or out of all)			
Crest factor of output current	3:1 (Max.)			
<b>Battery</b>				
Voltage	16*12V7 AH	192V	16*12V7 AH	192V
Type	Sealed lead acid, maintenance free			
Charge time	90% capacity in 8-10 hours			
<b>Warning Settings</b>				
Mains failure	Buzzer calling 1 time every 4 seconds			
Mains abnormal	Buzzer calling 1 time every 4 seconds Mains mode indicator light flashing			
Battery running out	Buzzer calling 1time every 1second; Battery mode indicator light flashing, Battery low-voltage indicator lighting			
Over-load	Over-load indicator lighting, buzzer long calling			
UPS abnormal	Failure indicator lighting, buzzer long calling			
<b>Protection Settings inside</b>				
Battery	Automatically switch off UPS while battery low-voltage; Restarting while mains supply resume; Small circuit breaker protection			
Over-load	Automatically switch to bypass in 60 seconds when 120%-150% overload , automatically resume when load become normal			
Over-temperature	Automatically switch to bypass when temperature $> 85^{\circ}\text{C}$ inside UPS			
Output short circuit	Current limit, turn off automatically, Small circuit breaker protection			
UPS abnormal	Automatically switch to bypass			
Clutter filter	10~100KHz at 40dB; 100KHz~100MHz at 70dB			
<b>Control panel</b>				
LCD panel	Working mode, I/ O voltage, I/ O frequency, Battery voltage, Output power percentage, Inverter temperature			
Battery low-voltage indicator light	Lighting when bettery low voltage			
Over-load indicator light	Lighting when over load			
Failure indicator light	Lighting when UPS failure			

UPS status indicator light	Mains mode; battery mode; inverter mode; bypass mode; UPS abnormal						
<b>Safety standard</b>							
Safety	IEC60950: 1999; GB4943-2001						
EMI	IEC61000-4-2, GB9254-1988						
EMC	IEC61000-4-2 (Level 4), IEC61000-4-3 (Level 3) IEC61000-4-4 (Level 4), IEC61000-4-4 (Level 4)						
<b>Environment</b>							
Temperature	0~40℃						
Humidity	20~90% no condensing						
Altitude	<1000m (output power reduces 5% for each additional altitude 500m)						
Noise	<58dB (1m)						
<b>Appearance</b>							
Method of connecting wire	Terminal blocks						
Net weight (battery free)	96Kg	56Kg	110Kg	65Kg	155Kg	200Kg	245Kg
WxDxH (mm)	230x580x540		230x580x700		310*590*8 70		
<b>Other</b>							
Machine efficiency	> 85%						
Transfer time	0ms						
Communication	RS232 interface; external SNMP adaptor (optional)						