



Prostar Low Frequency Online UPS
宝星工业型UPS

Neptune海王星系列 (8kVA-100kVA) 3:1



LONG
BACKUP



AVR



TEL/MODEM
PORT



SOFTWARES



SURGE
PROTECTION



DIGITAL
DISPLAY



LIGHTNINGPROOF

Series Overview 系列概述

Neptune 海王星系列采用先进的DSP全数字控制处理技术及IGBT高频脉宽调制技术(PWM)。双变换在线式拓扑结构设计,使UPS的输出为频率跟踪、锁相、稳压和滤除噪声的不受电网波动干扰的纯净正弦波电源,使UPS对用户设备提供更为全面的保护。经过宝星研发中心十多年的精心设计出的模块化结构,整体运行可靠,稳定性能比普通UPS高出5倍之多,MTBF超过30万小时。

Neptune(海王星)系列配备标准式内置输出隔离变压器、静态旁路开关及手动维修开关,使得本系列UPS具有抗短路能力,可以应用于恶劣的使用环境。另外带有完善的保护功能:且有交流输入过、欠压,输出过、欠压,输出过载,短路保护,逆变器、整流器过温保护,电压欠压预警,电池过充电保护等多种保护于一体,保证系统运行的稳定性和可靠性。

Neptune(海王星)系列包括三进单出GM8K-GM100K,可8台直接并机,方便快捷。灵活的并机技术可适用于不同负载及系统,按客户的需求构成N+1或N+X工作架构,还能根据客户的不同需求,进行不同容量的随意8台并机,由并联冗余系统中全部UPS来平均负担系统负载,并联冗余系统中任何一台UPS发生故障,其余UPS立即分担其负载,确保系统正常运行。并且在并机过程中,并不用特意设定主机备机,而是灵活的随客户选定,首先开通的机器自动设定为主机,当主机出现系统故障时,主机身份即时转移到另一台机器上去,从而保证了客户在使用过程中的电力供应,成为真正的不间断电源。



Neptune Series UPS is adopting the technology, which combined with the world's most advanced DSP digital control technology currently, and IGBT high frequency Pulse Width Modulation technique (PWM). Double-conversion online topology design makes the output frequency of UPS, which used for tracking, phase-locking, voltage regulator and filter out noise, interference from the power grid fluctuations in pure sine wave power supply, and make the UPS more comprehensive and perfectly protection for the users. After Prostar R & D center elaborative designed for more than 10 years, Prostar has designed a modular structure, whose overall operation is 5 times more reliable and stable performance than regular UPS, MTBF is over 300,000 hours.

Neptune Series UPS equipped with standard built-output isolation transformers, static bypass switch and manual maintain switch, making this series UPS has a very high capacity to engage in short-circuit. It could be used for the worst environment. Also it has perfect protect function. Moreover, it has the AC input, over-voltage, under-voltage, output over-voltage, short circuit protection, inverter, rectifier over-temperature protection, voltage under-voltage warning, battery over charging protection and other protections in one, to ensure system operation stably and reliably.

Neptune Series UPS includes 3-phase ins and single phase out from GM8K-GM100K, which can be in parallel with 8 units UPS directly, conveniently and fast. flexible parallel technology could be applied to different loads and systems. According to the needs of customers' constitute, it could make N+1 or N+X construction, but also according to the different needs of customers with different capacity, it could be in parallel with random 8 units UPS, and all the load will be loaded by all 8 units UPS averagely of the parallel redundant UPS system. Any UPS of the parallel redundant system was failed, the UPS will share its load immediately, to ensure system running normally. During the process of the parallel UPS, it does not set the host and the standby one, but was selected by customers flexibly. The first turned on UPS is automatically set to the host, when the host system failed, the host identity immediately transferred to another UPS, thereby ensuring the supply of electricity for clients during the using process, so it could become a true uninterruptible power supply.

Function Features 性能特点

1

DSP全数字控制技术 DSP digital control technology

核心系统采用先进的DSP全数字控制技术，可有效保证UPS核心系统的精确、快速运行。

Core system uses the world's most advanced all-digital DSP control technology, which can effectively guarantee the UPS' core system accurate, and fast running.

2

先进的IGBT逆变技术 Advanced IGBT inverter technology

高效率高可靠的IGBT逆变技术与高频脉宽调制技术PWM相结合，降低系统噪音及电力损失，确保用户能在各种工作负荷状态下获得高品质电压输出及最高的经济效益，更使得输入效率超过95%以上。

Combined high-reliable and high-efficiency IGBT inverter technology with high-frequency Pulse Width Modulation technology (PWM). It could reduce noise and power loss, to ensure users can load in a variety of working situations and obtain high-quality voltage output and maximum cost-effectiveness, but also make input efficiency more than 95%.

3

双变换纯在线技术 Pure-online double conversion technology

可靠、稳定的经过滤波和调节的正弦波输出的双变换纯在线技术，不仅具有大气扰动抑制滤波器，还标配输出隔离变压器、静态旁路、维修旁路，让本款产品具更高的抗短路电流能力，可以应用于恶劣的工作环境。

Reliable and stable, after filtered and regulated, the output sine wave from pure-online double conversion technology, not only has the atmospheric disturbance suppression filter, but also with the standard output isolation transformers, static bypass, maintenance bypass, make this product with higher ability to engage in short circuit current. And it can be applied to the worst working environment.

4

保护功能 Perfect protection

系统保护功能：有交流输入过、欠压，输出过、欠压，输出过载，短路保护，逆变器、整流器过温保护，电压欠压预警，电池过充电保护等多种保护于一体，保证系统运行的稳定性和可靠性。

Perfectly system protection functions: It has AC over-voltage, under-voltage, output over-voltage, under-voltage, output overload, short circuit protection, inverter, rectifier over-temperature protection, voltage under-voltage warning, battery over charging protection and other protections in one to ensure the system to operate stably and reliably.

5

强大的冗余并机功能 Powerful Redundant Parallel Connection Function

采用可靠的工业型模块化结构设计，再加上DSP全数字控制技术的核心系统，让本款产品不但拥有可以用于N+1或N+X冗余并机或扩容的能力，还允许不同功率、不同时间的机器进行随意并联使用，可8台任意并机，大大降低了用户的前期采购成本及后期扩容成本。

Durable and reliable design of industrial-type modular structure, combined with full digital DSP control technology core system, make this product not only can be used for N+1/N+X redundancy and the ability of enlarge the capacity, but also permit different power and different times of the UPS could be in parallel. It greatly reduced the user's pre-and post-purchasing costs, and increased capacity costs, but also expanded upper spaces of increasing capacity.

6

强大的通讯系统 Powerful communication system

标准配备RS232接口、RS485接口、干接点接口、紧急切换装置EPO输入接口。适用于RS232、RS485、MODBUS等多种协议。通过SNMP适配器，UPS具有远程网络管理功能，提供即时的UPS资料和电源信息，通过各种网络管理系统进行通讯和管理，另外还可以通过手机监控，以微信或短信形式发送告警信息。

Standard equipped with RS232 interface, RS485 interface, dry contact interface, emergency switch device EPO input interface. Applicable to RS232, RS485, MODBUS and other agreements. With the SNMP adapter, the UPS has remote network management capabilities that provide instant UPS data and power information, through a variety of network management system for communication and management. In addition, alarm information can be delivered via Wechat or SMS by mobile phone monitoring.

7

人性化面板显示 Humanized panel display

采用7英寸全彩触摸屏，可提供多种语言显示，能够同时提供图形显示和数字显示，适合使用者查看状态、数据和进行操作控制，可自行设置系统参数、日期、输出电压、电池容量、报警功能、轻负载关机、系统定时开机、MODEM设置等命令，还能存储多达120条的异常故障信息，可供用户随时查询，及时掌握UPS信息。

Using 7-inch full-color touch screen it can provide a variety of language display, also could provide the both graphical and digital display, suitable for users to view the status, data and operational control, can set their own system parameters, date, output voltage, battery capacity, alarm Function, light load shutdown, the system regularly boot, MODEM settings and other commands, but also can store up to 120 abnormal fault information for users query at any time for grasping the UPS information timely.

8

预测报警系统

Prediction warning system

LCD面板自动检测功能，及时提前预报警，具有开机自诊断功能，能及时避免了因UPS隐患而可能引发的故障风险及人身安全。还能设定当电池放电到备用时间小于某一设定值时进行自动报警。

LCD panel automatic detection function and timely warning in advance, with the boot self-diagnosis function. It could avoid the hidden danger in time due to UPS' failure, which caused risks. Also it could automatically alarm by setting the battery discharge to standby time is less than a set value.



9

低功耗高效率

Low-power dissipation but high-efficiency

在ECO经济模式下达到了98%以上的超高运行效率，可有效的降低了系统本身所消耗的电力，是低碳时代的优选产品。

To achieve more than 98% of ultra-high efficiency under ECO economic model, which can effectively bring down the amount of electricity, and effective in accordance with the requirements of energy-saving target of the country.

10

超强的环境适应能力

Super-strong environment adaptability

本产品带有超强的环境适应能力,宽广的交流输入范围,大大的降低了电池的使用频率,有效的延长了电池的使用寿命。电路板均采用三防工艺,防尘、防雾、防盐,更能在恶劣环境下使用,UPS使用寿命更长。

This product has superior environmental adaptability, wide AC input range, greatly reduces the frequency of battery using, and effectively extends the battery life. All circuit boards are used three anti-technology of dust-proof, anti-fog, anti-salt, which making UPS using life much longer in more in the bad environment.

11

强大的过载能力 Powerful Overload Ability

使用双变换纯在线技术,标配输出隔离变压器、静态旁路、维修旁路。逆变过载能力达到了110%/125%/150%过载时能维持300min/10min/1min。旁路过载能力达到了150%/170%/250%过载时能维持60min/10min/1min。

Using the pure-online double conversion technology, with the output isolation transformers, static bypass, and maintenance bypass. Inverter Overload Ability reached 110% / 125% / 150% overloading time can last for 300min/10min/1min. Bypass Overload Ability reached 150% / 170% / 250% overloading time can last for 60min/10min/1min.

12

先进的通讯功能 Advanced communication features

运行参数显示 Operating parameters display

电压、电流、频率、电池温度、负载百分比、当前负载下电池剩余后备时间。

Voltage, current, frequency, battery temperature, load percentage, the current load back-up battery time remaining.

命令 Command

电池测试、系统关机、参数设置、在LCD上或远程控制面板上可操作紧急关机。

Battery test, system shutdown, parameter settings, and also can shutdown the UPS emergently on the LCD or on remote control panel.

运行参数设置 Operation parameter setting

可设置当前日期、输出电压、电池容量、报警功能、轻负载关机、系统定时开关机、MODEM设置等。

To set the current date, output voltage, battery capacity, alarm function, light-load shutdown, the system timer switch machine, MODEM settings and so on.

支持软件界面 Supported software interface

Windows9x、2000、NT、Me、XP、Linux、Novell、Macosx、NT4.0等。Windows9x, 2000, NT, Me, XP, Linux, Novell, Macosx, NT4.0, etc.

报警信息 Alarm information

多达120多条常用报警信息及内部故障实时记录,当机器出现故障时,UPS系统会自动记录故障编码与时间,编码内容可参照用户手册查询。支持“微信告警”、“手机短信报警”功能,在设备告警时及时发出通知,满足更多的移动互联网用户的需要,提高不间断电源备的管理和维护效率。

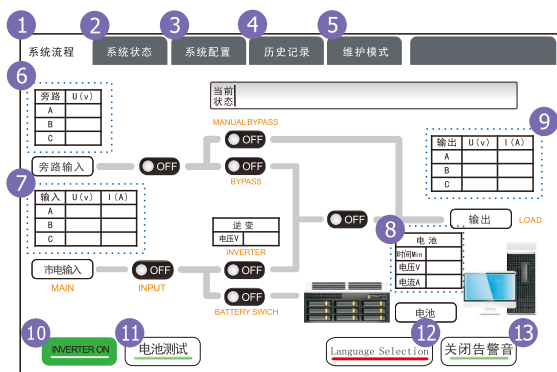
Up to 120 commonly-used alarm information and internal fault real-time records, and UPS system will automatically record the fault code and time when the machine fails, meanwhile, the contents of the code can be referred to the user's manual. Support "WeChat alarm", "SMS alarm" function, the notice information will be sent timely when the device alarm to meet the need of more mobile and Internet users, and to improve the management and maintenance efficiency of the uninterrupted power supply.

电池管理功能 Battery management functions

启动电池测试,可以得出电池电压、电流、放电时间等数据。设置预报警功能,当电池放电到备用时间小于某一设定值时报警。

Display input / output bypass voltage, frequency, load percentage, battery backup time and so on. To start battery test, we can obtain the battery voltage, current, discharge time and other data. To set forecast alarm function, also it could automatically alarm by setting the battery discharge to standby time is less than a set value.

○ Touch screen Introduction 触摸屏介绍



- | | | |
|-------------------------|---|-------------------------------|
| 1 系统流程
Diagram | 6 UPS旁路数据界面
UPS Bypass data interface | 11 电池测试
Battery test |
| 2 系统状态
Status | 7 UPS输入数据界面
UPS input data interface | 12 语言选择
Language Selection |
| 3 系统配置
Configuration | 8 UPS电池及其他数据界面
UPS battery and others data interface | 13 静音开启/关闭
Beep ON/OFF |
| 4 历史记录
Events | 9 UPS输出数据界面
UPS output data interface | |
| 5 维护模式
Maintenance | 10 INVERTER ON/OFF
INVERTER ON/OFF | |

○ Internal View 内部视图

- 1 数字控制 Digital Control
- 2 内视图 Inside View
- 3 侧视图 Side Elevation
- 4 变压器 Transformer



○ Applied Scope 应用范围



Technical Specification 技术参数

» 8KVA~100KVA 3:1

HM8K ~ HM100K(三进单出) HM8K ~ HM100K(Three-ins and Single out)									
型号 Model	GM8K	GM10K	GM15K	GM20K	GM30K	GM40K	GM60K	GM80K	GM100K
容量(VA/W) Capacity (VA/W)	8K/6.4K	10K/8K	15K/12K	20K/16K	30K/24K	40K/32K	60K/48K	80K/64K	100K/80K
电池电压 Battery Voltage	384V								432V
整机效率 UPS efficiency	≥95%								
噪音 Noise	48 ~ 54dB(距离1m) 48 ~ 54dB(Distance 1m)				53 ~ 62dB(距离1m) 53 ~ 62dB(Distance1m)				
尺寸 Size(W×D×Hmm)	485x695x1000				555x740x1220		800x750x1400		1200x800x1400
重量(Kg) (不含电池) Weight(Kg)(Excluding battery)	180	186	215	230	239	285	425	522	750
输入 Input	电压 Voltage	三相四线+地线,380V±25% 3 phases 4 wires and ground,380V±25%							
	频率 Frequency	50Hz/60Hz±5% (自动辨识) 50Hz/60Hz±5% (Automatically)							
	功率因数 Power factor	≥0.95							
逆变输出 Inverteroutput	电压 Voltage	220V±1%							
	频率 Frequency	50Hz/60Hz±0.05%(电池供电时) 50Hz/60Hz±0.05%(By Battery)							
	谐波失真 Harmonic distortion	线性负载<3%, 非线性负载<5% Linear Load<3%, Non-linear Load<5%							
	不平衡电压 Imbalance voltage	平衡负载≤1%,不平衡负载≤3% Balance load≤1%,Imbalance load≤3%							
	相移角度 Phase shif angle	平衡负载≤±1°,不平衡负载≤±2° Balance load≤±1°, Imbalance load≤±2°							
	动态瞬变范围 Transient response	输出0~50%~100%时≤5%,恢复时间≤10ms Output at 0~50%~100% ≤5%, response≤10ms							
	过载能力 Overload capacity	110%≥300 Min,125%≥10 Min,150%≥1 Min							
	峰值因数 Crest Factor	3:1							
	波形 Wave form	纯正弦波 Pure sina wave							
	切换时间 Transfer time	0ms							
	最大充电电流 Max. charging current	0.2A×C10							
电池 Battery	充电时间(标准型) Charging time(Standard)	12小时 12 Hours							
系统性能 System	保护功能 Protective function	输入过压、欠压, 输出过载、短路, 逆变器过温, 电池欠压、过压 Input over-voltage, under-voltage; output overload, shortcircuit; Inverter over-temperature; Battery under-voltage, over-voltage							
	环境范围温度 Running temperature & Humidity	温度0℃~40℃, 湿度0-95% (非冷凝) 0-40 degree celsius, less than 95% (without condensing)							
	海拔 Altitude	<1000m (升高100m降低1%最大4000m) <1000m (with increase of 100m, it will reduce output of 1%) max 4000m							
	通信接口 Communication interface	RS232、RS485							
	远程信号 Remote signaling	干接点(电池低压, 电池放电, 旁路/故障)、EPO接口 Dry contact (battery low, battery discharging, bypass/fault); EPO							
	远程控制 Remote control	EPO紧急切换装置、旁路 EPO and Bypass							
	防护等级 Degree of Protection	IP20 (前门打开时) IP20 (front door opened)							
	冗余并机 Parallel mode	N+1、N+X、支持不同功率并机 N+1、N+X、can be in parallel with differernt power capacity							
	支持软件界面 Software interface	Windows9x、2000、NT、Me、XP、Linux、Novell、Macosx、NT4.0							
	平均无故障时间 Mean time between failures	30万小时 300,000 Hours							
	其它 Optional	防尘防潮、逆变隔离变压器、雷电突波吸收、静态开关、手动维修开关 Dustproof & dampproof, Isolating inverter transformer, lightning surge absorption, static switches, manual maintenance switch							

● 备注: 产品规格如有变更, 恕不另行通知。Remarks: Products specifications are subject to change without notice.

广东宝星新能科技有限公司
Guangdong Prostar New Energy Technology Co., Ltd.

[Http://www.Prostar-cn.com](http://www.Prostar-cn.com)

微信/WeChat



网站/Website

