



**Prostar Modular UPS**  
**宝星模块化UPS**

Mars 火星系列 (20KVA-600KVA) 3:3



## ○ System Overview 系列概述



Mars 火星系列模块化UPS采用高效率在线双转换技术，效率可达94.5%，与最新的数据机房设计无缝集成，是一款冗余可扩容的高可靠性模块化UPS系统。

Mars 火星系列模块化UPS系统结构极具弹性，功率模块采用在线热插拔设计，方便在系统运行时可随意移除、安装和维护而不影响系统的运行和输出，使投资规划真正实现随需扩展，既满足用户后期设备的扩展需求，又降低了初期购置成本。

Mars 火星系列模块化UPS提供20KW和30KW两种功率模块以及机柜系统，用户可根据负载需求进行灵活配置。单个机柜最高可以实现600KVA的容量，并提供90KW和120KW两款可内置电池模块的机柜系统，方便用户选择。

Mars series modular UPS uses high efficient online double conversion technology, and the efficiency can reach 94.5%. And it's seamless integrated with the latest data room designs, which is a high-reliability redundant scalable modular UPS systems.

Mars series modular UPS system with extremely flexible architecture, and it's power modules using online hot-swappable design, which can easily be removed, installed and maintained when the system is throughning, but without affecting system operation and output, which made the investment plan comes true according to the requirement. Which could both to meet the user extended equipment needs at later period, but also reduce the initial purchase cost.

Mars series modular UPS provides 20KW and 30KW power modules and two kinds of cabinets system, the user can be flexibly configured according to the load demand. The single cabinet can achieve maximum capacity up to 600KVA, and provide 2 kinds ups system of 90KW and 120KW, which could be with built-in battery modules, for users choose easily .

## ○ Module Cabinet 模块机柜



MPS90K-30U



MPS120K-42U



MPS120K-30U



MPS180K-30U



MPS210K-42U

内置电池模块  
Built-in Battery Module

外接电池组  
External Battery Pack

## ○ Range Of Applications 应用范围



## ○ Function Features 功能特点

### 高效率在线双转换技术 High efficiency online double conversion technology

01

Mars系列模块UPS采用在线双转换技术，具有高性能，在50%负载的情况下，效率超过94.5%。它显著降低总使用成本（TCO）。

Mars series modular UPS is applied online double conversion technology with high performance over 94.5% at 50% load. It significantly reduces overall Total Cost of Ownership(TCO).

### 高扩展性 High scalability

02

DSP控制提供一个高性能的解决方案，集成了模块化设计和并机技术，简化了未来的电源功率扩容。

DSP control provides an improved solution with high performance. Integrated with modular design and parallel technology, simplifies future power expansion.

### 完整的输出功率因数 Unity output power factor

03

Mars系列提供完整的输出功率 (kVA=kW)，为关键负载提供最大功率容量。它符合最新的服务器的要求，为IT投资优化每一分钱。

Mars series delivers unity output power (kVA=kW) providing the maximum power capacity to mission critical loads. It satisfies the requirements of the latest servers and optimizes IT investment with every penny.

### 模块化设计降低平均修复时间 Modular design lowers MTTR

04

采用模块化设计的电源模块，STS模块和电池模块，将简化维护和更换，降低平均修复时间。

Modular design is applied in power module, STS module and battery module. It will simplify maintenance and replacement with low MTTR(Mean Time To Repair).

### 易于安装和维护 Ease of installation and maintenance

05

内置维修旁路，在维修期间确保为关键负载提供持续电源。此外，为便于安装和维护，所有的面板控制和连接器都是前端操作的。

Built-in maintenance bypass assures continuous power to critical loads during UPS maintenance. Besides, to facilitate installation and maintenance, all panel control and connectors are front accessibility.



### 高过载能力 High overload capability

06

模块化UPS过载110%支持60分钟，过载120%支持10分钟，过载150%支持1分钟。

Modular UPS supports, 110% overload for 60 minutes, 120% for 10 minutes, and 150% for 1 minute.

### 10英寸全彩色触摸屏设计便于管理 Graphic 10"full-color touch screen design for easy management

07

设计上为了方便管理，配备10英寸全彩色触摸屏。直观的设计增强显示信息的识别和先进的配置。

Designed for easy management, equipped with 10" graphic full-color touch screen. Intuitive design enhances display information identified and advanced configuration.

### N +1或N+X并联冗余电源保证 N+1 or N+X parallel redundancy for power guarantee

08

可扩展的架构可允许您优化成本费用来满足电力需求，在同一个机架内，通过垂直扩展为一个单一的机架从20KVA扩展到600KVA，实现N+1或N+X冗余。

Scalable architecture allows you to optimize cost expense to meet power demands by vertically expanding is a single rack enclosure from 20KVA to 300KVA and achieve N+1 or N+X redundancy in the same rack.



## ○ Module Specification 模块参数

| 类型 Type             | 型号 Model    | 容量 Capacity    | 尺寸 Size, DXWXH (mm) | 重量 Weight (Kgs) |
|---------------------|-------------|----------------|---------------------|-----------------|
| 功率模块 Power Module   | MPS-20KW    | 20KVA/20KW     | 650x440x132(3U)     | 34              |
|                     | MPS-30KW    | 30KVA/30KW     |                     | 34.5            |
|                     | MPS-40KW    | 40KVA/40KW     | 510x510x178         | 44              |
|                     | MPS-50KW    | 50KVA/50KW     | 510x510x178         | 45              |
|                     | MPS-60KW    | 60KVA/60KW     | 750x438x130         | 44              |
| 电池模块 Battery Module | MPS-Battery | 12V9AH X 10Pcs | 735X107X155         | 26              |

● 备注：一整组电池包括4个模块，每个电池模块可安装10个12V9AH铅酸蓄电池。

Remarks: One battery module contains 10pcs of 12V9AH sealed lead acid batteries in one tray. One complete battery set contains 4 battery modules.

# ○ Technical Specification 技术参数

» 20KVA~600KVA 3:3

| 20KVA-600KVA 3P/3P 三进三出机型        |   |   |  |          |          |                      |         |                |                |  |  |
|----------------------------------|---|---|--|----------|----------|----------------------|---------|----------------|----------------|--|--|
| 机柜型号 Cabinet Model               | MPS90K  | MPS120K   | MPS180K  | MPS210K  | MPS240K  | MPS300K              | MPS400K | MPS500K        | MPS600K        |  |  |
| 机柜最大容量 Maximum Capacity          | 90kW  | 120kW   | 180kW  | 210kW    | 240kW    | 300kW                | 400kW   | 500kW          | 600kW          |  |  |
| 相位 Phase                         | 三进三出 3-phase in / 3-phase out                 |   |  |          |          |                      |         |                |                |  |  |
| 电池电压 Battery Voltage             | ±192V/±240V                                   |   |  |          |          |                      |         |                |                |  |  |
| 电池模式 Battery Type                | 内置电池模块<br>Built-in Battery Module             | 外置电池组 External Battery Pack   |  |          |          |                      |         |                |                |  |  |
| 功率模块容量 Power Module Capacity     | 30kW  | 20kW/30kW/50kW/60kW   |  |          |          |                      | 40kW    | 50kW           | 60kW           |  |  |
| 最大功率模块数量 Max. Power Module NO.   | 3   | 2   | 3  | 7        | 4        | 5                    | 10      | 10             | 10             |  |  |
| 最大电池模块套数 Max. Battery Module NO. | 3   | -   | -  | -        | -        | -                    | -       | -              | -              |  |  |
| 尺寸 Size, D X W X H (mm)          | 1100x514x763                                  | 1100x600x1475   | 20/30/60kW:1100x600x2010<br>50kW:650x1095x2000 |          |          |                      |         | 1300X1100X2000 | 1100X1200X2010 |  |  |
| 机柜净重 Cabinet Net Weight (Kgs)    | 183   | 20/30kW:335<br>60kW:270   | 20/30kW:438<br>60kW:300                        | 30kW:549 | 60kW:466 | 30kW:620<br>60kW:510 | 450     | 450            | 1020           |  |  |
| 输入 Input                         | 输入电压 Input Voltage                            | 3 x 380VAC/400VAC/415VAC (3Ph+N)  |  |          |          |                      |         |                |                |  |  |
|                                  | 电压范围 Voltage Range                            | 100%负载305~478VAC; <70%负载208~304VAC 305~477VAC at 100% Load; 208~304VAC at <70% Load   |  |          |          |                      |         |                |                |  |  |
|                                  | 额定频率 Nominal Frequency                        | 50/60Hz(自动适配) 50/60Hz(Auto Sensing)   |  |          |          |                      |         |                |                |  |  |
|                                  | 频率范围 Frequency Range                          | 40Hz~70Hz   |  |          |          |                      |         |                |                |  |  |
|                                  | 功率因数 Power Factor                             | 100%负载>0.99; 50%负载>0.98 >0.99 @ 100% Load, >0.98 @ 50% Load   |  |          |          |                      |         |                |                |  |  |
|                                  | 电流谐波失真 (THDI)<br>Harmonic Distortion (THDI)   | < 3% @ 100% 负载 < 3% @ 100% Load   |  |          |          |                      |         |                |                |  |  |
| 输出 Output                        | 额定电压 Nominal Voltage                          | 3 x 380VAC/400VAC/415VAC (3Ph+N)  |  |          |          |                      |         |                |                |  |  |
|                                  | 电压稳定性(稳态)<br>Voltage Regulation(Steady state) | ≤ ± 1%典型值(平衡负载); ≤ ± 2%典型值(不平衡负载); ≤ ± 1%Typical(Balanced Load); ≤ ± 2%Typical(Unbalanced Load)                             |  |          |          |                      |         |                |                |  |  |
|                                  | 电压稳定性(瞬态)<br>Voltage Regulation(Transient)    | ≤ ± 5%典型值 ≤ ± 5% Typical  |  |          |          |                      |         |                |                |  |  |
|                                  | 额定频率 Nominal Frequency                        | 50/60Hz   |  |          |          |                      |         |                |                |  |  |
|                                  | 频率范围(同步范围)<br>Frequency Range(Synchronized)   | 46Hz~54Hz or 56Hz~64Hz  |  |          |          |                      |         |                |                |  |  |
|                                  | 过载能力 Overload Capability                      | 100-110%60分钟,111-120%10分钟,126-150%60秒,>150%200毫秒 1 hour for 100-110%,10 min for 110-120%,1 min for 126-150%,200ms for >150% |  |          |          |                      |         |                |                |  |  |
| 电池/充电<br>Battery/Charger         | 谐波失真 Harmonic Distortion                      | ≤ 1.5% THD(线性负载); ≤ 4% THD(非线性负载) ≤ 1.5% THD(Linear Load); ≤ 4% THD( Non-linear Load )                                      |  |          |          |                      |         |                |                |  |  |
|                                  | 效率 Efficiency                                 | 最高可达94.5% Up to 94.5%   |  |          |          |                      |         |                |                |  |  |
|                                  | 额定电压 Nominal Voltage                          | +/- 216V (12V x 36Pcs)  |  |          |          |                      |         |                |                |  |  |
|                                  | 最大电压 Maximum Voltage                          | +/- 240V (12V x 40Pcs)  |  |          |          |                      |         |                |                |  |  |
|                                  | 最低电压 Minimum Voltage                          | +/- 192V (12V x 32Pcs)  |  |          |          |                      |         |                |                |  |  |
|                                  | 浮充电压 Float Charging Voltage                   | 2.25V/Cell  |  |          |          |                      |         |                |                |  |  |
| 环境条件<br>Environment              | 大充电压 Boost Charging Voltage                   | 2.35V/Cell  |  |          |          |                      |         |                |                |  |  |
|                                  | 温度补偿 Temperature Compensation                 | Yes   |  |          |          |                      |         |                |                |  |  |
|                                  | 最大充电电流 Maximum Charging Current               | 每个模块8A(用户可调) 8A for each power module (User adjustable)   |  |          |          |                      |         |                |                |  |  |
|                                  | 工作温度 Operation Temperature                    | 0~40° C   |  |          |          |                      |         |                |                |  |  |
|                                  | 相对湿度 Relative Humidity                        | 0~95% 不结露 0~95% Non-condensing  |  |          |          |                      |         |                |                |  |  |
|                                  | 高度 Altitude                                   | <1000m 额定功率 <1000m for Nominal power  |  |          |          |                      |         |                |                |  |  |
| 管理<br>Management                 | IP防护等级 IP Class                               | IP20  |  |          |          |                      |         |                |                |  |  |
|                                  | 智能型RS-232或USB SmartRS-232or USB               | Windows® 2000/2003/XP/Vista/2008、Windows® 7/8、Linux、Unix、MAC  |  |          |          |                      |         |                |                |  |  |
|                                  | 选配 SNMP Optional SNMP                         | 支持由SNMP管理员和网络浏览器进行电力管理 Power management from SNMP manager and web browser   |  |          |          |                      |         |                |                |  |  |

● 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.

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