

YFG80 系列不间断电源

Series uninterrupted power supply



产品概述 General



三进单机型 6-20kVA Three-in single-out type
三进三机型 6-20kVA Three-in three-out type



三进单机型 30-60kVA Three-in single-out type
三进三机型 30-60kVA Three-in three-out type

YFG80 系列三相工频智能型在线式 UPS，容量从 6KVA-400KVA 系统采用在线双变换拓扑架构设计，低消耗、高效率，在市电输入中断或不稳定时，能以零转换的时间由后备电池组提供电源，多达 8 台的并机结构，使最大输出功率达到 3200KVA，提供了比小容量 UPS 更多的优点，集中式的 YFG80 电源系统设计成满足大型电脑系统，电信及工业用电场所，容量易于扩充，除了并联的冗余结构，系统还提供了关键应用所必需的系统安全特性。系统设计易于安装与维护。智能高级电池充电管理功能延长电池寿命，包括：可编程的放电测试，减少充电时的纹波电流及过压保护，可选的热敏探测和软件保证了最佳的温控充电方式。

As for YFG80 series three-phase power frequency intelligent online UPS of capacity 6KVA-400KVA, the system adopts online double-conversion topological structure design, with low consumption and high efficiency, which can achieve the power supply by backup battery unit with zero switching time in case of interrupted or unstable utility power supply. The parallel structure with as many as 8 sets can achieve the maximum power output up to 3200KVA, which provides more advantages than small-capacity UPS. The centralized YFG80 power system is designed for application in large-scale computer system, telecommunication and industrial electrical occasions, whose capacity is apt to be expanded. Apart from the parallel redundancy structure, the system also provides the system safety characteristics required by key applications. The system is designed to be easy for installation and maintenance. The advanced function of intelligent battery charge management can prolong the battery life, including programmable discharge test, reducing current ripple and providing over-voltage protection during charge, while optional heat sensitive detection and software ensuing the optimal temperature control charge mode.

产品特性 Product features

高可靠性

- 1 采用双转换在线式的结构设计，隔绝了外界电源的干扰
- 2 良好的过载能力
- 3 100% 不平衡保护设计，负载缺相系统的可持续运行
- 4 100% 非线性负载能力
- 5 IGBT、SPWM 脉宽调制技术
- 6 工业级的 UPS 设计

High reliability

- 1 Double-conversion online structure design isolates the interference from external power supply
- 2 Strong overload capacity
- 3 100% imbalance protection design, continuous running of load open-phase system
- 4 100% non-linear load capacity
- 5 IGBT and SPWM pulse-width modulation technology
- 6 Industrial-grade UPS design

超安全性

- 1 具备输出隔离变压器，免除杂讯，雷击对抗电器的影响
- 2 配有静态旁路，维修旁路，电池维修旁路，不需要担心负载的使用
- 3 冷开机功能，即使停电也能紧急启动使用

- 1 Provided with output insulating transformer, free of impacts on resistor by noise and lightning stroke
- 2 Provided with static bypass and maintenance bypass and battery maintenance bypass, free of worries about the use of load
- 3 The cold-start function can realize the emergency start and use even if on power failure

灵活性

- 1 不同的负载及系统，可单机、1+1 并机或者 N+1 多机运行
- 2 模块化设计，维护方便
- 3 可选择的电池检测包，对电池进行智能管理

- 1 Different loads and systems, available for stand-alone, 1+1 parallel-machine or N+1 multi-machine operation
- 2 Module design, easy for maintenance
- 3 Optional battery check package for intelligent management of battery

经济性

Economy

整机效率高于 90%，ECO 模式下效率达到 95% 以上

Overall efficiency higher than 90%, up to 95% above under ECO mode

人性化界面

Humanized interface

LED/LCD 指示面板操作界面，工作效率和读取信息一目了然

Operation interface of LED/LCD indication panel with clear information on work efficiency and easy for reading

智能化

Intelligentization

通过提供的 RS232(RS422)、SNMP(可选件)，RJ45 等通讯接口，可实现远程管理和 TVSS 功能

Achieve remote management and TVSS functions via such provided communication interfaces as RS232 (RS422), SNMP (optional) and RJ45

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适用范围 Scope of application

计算机及外围设备	实验设备	Computer and peripheral equipment	Experimental equipment
信息传输系统	监控保安系统	Information transmission system	Monitor and security system
过程控制系统	消防照明系统	Process control system	Fire control and lighting system
精密测量设备	紧急逃生系统	Precision measurement equipment	Emergency escape system
核子医疗设备	网络系统及服务器	Nucleon medical equipment	Network system and server
IC 半导体厂, 封装厂	实时分析操作系统	IC semiconductor plant and packaging plant	Real-time analysis operating system
化学工程系统	电台发射及接收系统	Chemical engineering system	Radio sending and receiving system
自动测试系统	不容断电的工业应用领域	Automatic test system	Industrial application fields requiring uninterrupted power
纺织刺绣控制	卫星通讯系统	Textile and embroidery control	Satellite communication system

技术参数 Technical parameters

YFG80-6kVA~60kVA 三进单出机型 Three-in single-out type

规格 Spec.	6kVA	10kVA	15kVA	20kVA	30kVA	40kVA	50kVA	60kVA
容量 (kVA/kW) Capacity	6/4.8	10/8	15/12	20/16	30/24	40/32	50/40	60/48
输入电压 Input voltage	三相四线 + 地线 Three-phase four-wire + earth wire							
噪音 Noise	≤ 60dB(距离 distance 1m)				≤ 65dB(距离 distance 1m)			
尺寸 Dim.	620 × 343 × 995				650 × 700 × 1510			
重量 (kg) (不含电池)	130	165	190	210	400	450	530	620
Weight (kg) (exclude battery)								
电池电压 Battery voltage	DC192V				DC336V			

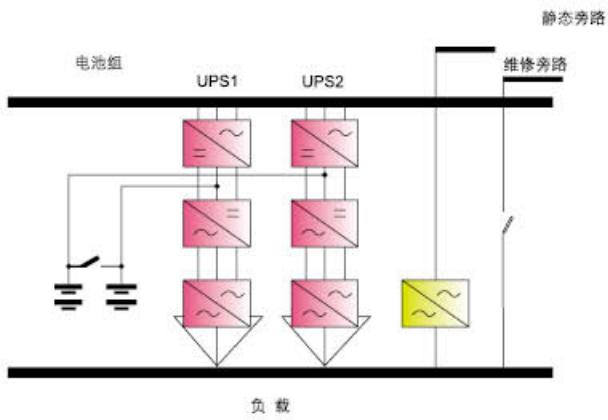
规格 Spec.	6kVA	10kVA	15kVA	20kVA	30kVA	40kVA	50kVA	60kVA
容量 (kVA/kW) Capacity	6/4.8	10/8	15/12	20/16	30/24	40/32	50/40	60/48
输入电压 Input voltage	≥ 95%							
噪音 Noise	≤ 55dB(距离 distance 1m)				≤ 56dB(距离 distance 1m)			
尺寸 Dim.	550 × 600 × 1135				650 × 700 × 1510			
重量 (kg) (不含电池)	260	280	310	340	480	520	560	580
Weight (kg) (exclude battery)								
电池电压 Battery voltage	DC192V				DC336V			

规格 Spec.	80kVA	100kVA	120kVA	150kVA	200kVA	250kVA	300kVA	400kVA
容量 (kVA/kW) Capacity	80/64	100/80	120/96	150/120	200/160	250/200	300/240	400/320
输入电压 Input voltage	≥ 95%							
噪音 Noise	≤ 65dB(距离 distance 1m)				≤ 68dB(距离 distance 1m)			
尺寸 Dim.	1250 × 750 × 1700				1450 × 750 × 1900			
重量 (kg) (不含电池)	780	860	980	1250	1600	1800	2100	2500
Weight (kg) (exclude battery)								
电池电压 Battery voltage	DC336V							

独有的并联冗余结构 Unique parallel redundancy structure

只有充分了解关键负载对电源的要求，才能设计出令人满意的 UPS 系统，本系统采用最先进的技术，以其独有的概念，推出了多台 UPS 并联要结构 (RPA)，确保达到系统的最高可靠性。本系列采用的并联系统令 UPS 的每一关键部位均具有备份保证，并使其得到充分控制，因此是名符其实的并联冗余。

The satisfactory UPS system can only be designed on the basis of having a full understanding on key load's requirements for power supply. This system adopts the latest technology and unique concept to launch multi-UPS parallel structure (RPA) to ensure the maximum reliability of the system. The parallel system adopted by this series provides backup guarantee and sufficient control for every key part, thus achieving the parallel redundancy really.



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通用参数 General parameters

输入 Input	电压 Voltage 频率 Frequency 功率因素 Power factor	三相四线制 380V ± 25% Three-phase four-wire system 380V ± 25% 50Hz 60Hz ± 10% ≥ 0.95
输出 Output	电压 Voltage 频率 Frequency 谐波失真 Harmonic distortion 不平衡电压 Imbalanced voltage 相移角度 Phase shift angle 动态暂态范围 Dynamic transient range 过载能力 Overload capacity 峰值因数 Peak value factors 切换时间 Switching time	三相四线制 380V ± 1% Three-phase four-wire system 380V ± 1% 50Hz 60Hz ± 0.05% (电池供电时) 50Hz 60Hz ± 0.05% (battery power supply) 纯正弦波, 失真度 < 3% (线性负载), < 5% (非线性负载) Pure sine wave, degree of distortion < 3% (linear load), < 5% (non-linear load) 平衡负载 ≤ 1% 不平衡负载 ≤ 3% 平衡负载 ≤ 1% 不平衡负载 ≤ 3% 平衡负载 ≤ 1° 不平衡负载 ≤ 3° 平衡负载 ≤ 1° 不平衡负载 ≤ 3° 输出 0~50%~100% 时 ≤ 3%, 恢复时间 ≤ 10ms ≤ 3% for output 0~50%~100%, recovery time ≤ 10ms 125% ≥ 10min, 150% ≥ 20s 5 : 1 纯在线式零转换 Pure online zero switching
电池 Battery	电池类型 Battery type 充电方式 Charge mode 充电时间 (标准型) Charging time (standard type)	铅酸密封免维护 Lead-acid seal, maintenance free PWM 相流定压, 电池智能管理系统 12 小时 12h 30
系统性能 System performance	系统性能 MTBF System performance MTBF 环境范围温度 Ambient temperature 支持软件界面 Support software interface 其它 Others	万小时 300,000h -10°C ~50°C, 湿度 0~93% 不结露, 海拔 ≤ 3000m -10°C ~50°C, 0~93% humidity with no dew, altitude ≤ 3000m Novell Netware Microsoft Windows2000 Windows NT Linux 防尘防潮设计、逆变隔离变压器、雷电突波吸收、手动旁路开关 Dustproof and moistureproof design, inverter isolating transformer, thunder surge absorber, manual bypass switch

同类机型功能比较 Function comparison with machines of the same kind

品牌 Brand	DYG60	同类机型 Machines of the same kind
性能 Performance		
独特的旁路 AC 高低压保护 (现信息产业部入网强制检验项目)	有 Available	无 N/A
Unique low/high-voltage protection for bypass AC (a compulsory inspection item for network access by the Ministry of Information Industry at present)		
因特网上电池实时、定时充放电、自检功能	有 Available	无 N/A
Real-time and timing charge and discharge and self-inspection function for battery on internet		
因负载大小自动调节电池放电终止电压(国外大功率 UPS 延长电池使用寿命技术)	有 Available	无 N/A
Regulate the battery discharge and terminate the voltage automatically in accordance with the load size (foreign technology for longer battery service life of heavy-duty UPS)		
无人值守功能 (CPU 控制)	有 Available	无 N/A
No-guard function (CPU control)		
功率器件功率余量大, 具有极高抗冲击能力	6K: 200DY 模块 module × 2 10K: 300DY 模块 module × 2 15K: 400DY 模块 module × 2	6K: 150DY 模块 module × 2 10K: 200DY 模块 module × 2 15K: 300DY 模块 module × 2
Power devices have big power allowance, possess high impact resistant capacity		
逆变变压器功率余量大	足功率容量	80% 功率容量或更低
Large power allowance of inverter transformer	Full power capacity	80% power capacity or lower
带载能力强	可 100% 负载长期运行工作	只能 80% 负载或更低负载长期运行工作
Strong load-bearing capacity	A available for long-time running with 100% load	Only available for long-time running with 80% load or lower
体积小、重量轻	与同功率级高频机体积重量相近	比同功率级高频机体积重量大
Compact and light	Similar volume and weight as high-frequency machines with the same power level	Larger volume and weight than high-frequency machines with the same power level
逆变器效率高 High efficiency of inverter	大于 90% Larger than 90%	小于 90% Less than 90%