

集散式逆变升压一体机

SPI1000K-TS/SPI2000K-TS



产品特点

高度集成 - 交钥匙解决方案

- 集成高效集散式光伏逆变器
- 配置升压变压器 (10kV/35kV、美变 / 欧变可选)、中压配电
- 集成多功能箱变测控装置, 一站式光伏厂区通讯解决方案

精益智能 - 全方位监控采集

- 集成多功能箱变测控装置, 智慧运行管理
- 采集汇流箱、逆变器及变压器信息, 快速精确定位故障
- 统一对外通讯接口, 集成精益管理, 快速部署与调试

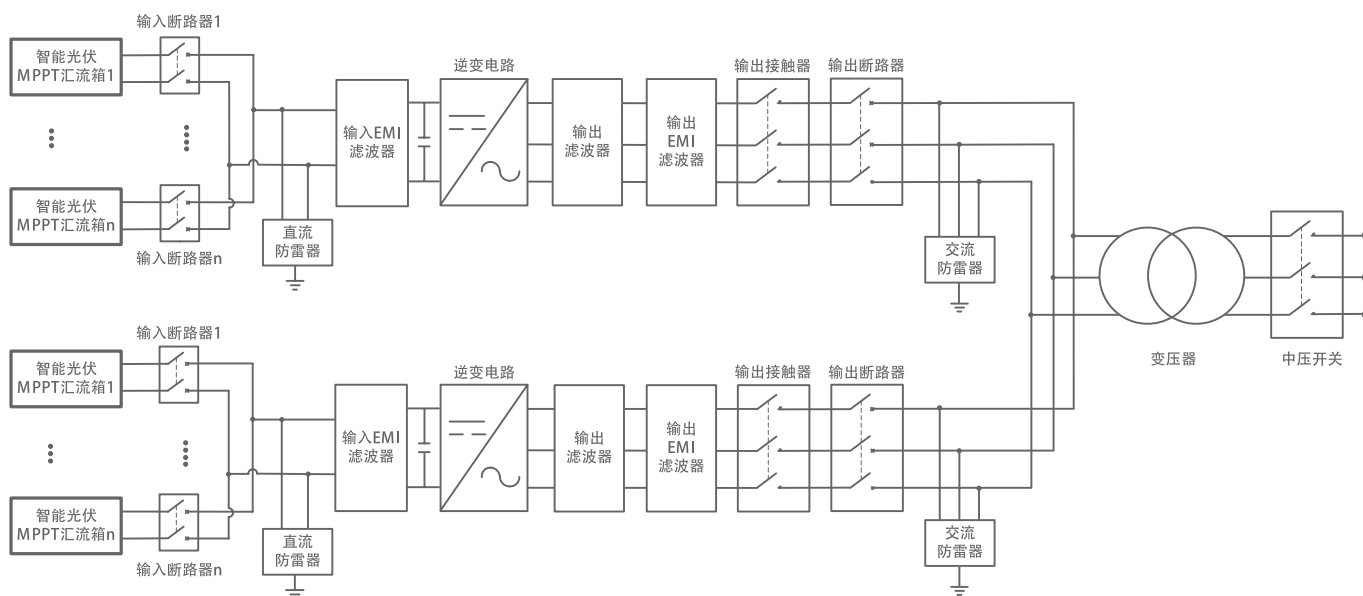
高效稳定 - 用户更放心

- 整机系统标准化生产, 一致性好
- 统一售后维护, 用户省心
- 优化逆变及升压单元, 系统效率更高
- 45°C 1.1 倍长期过载, 50°C 满载运行

降本增效 - 更低投资、更高收益

- 逆变器与变压器之间采用铜排连接方式, 线损降低 0.1%~0.3%
- 优化低压配电、连接线缆、安装基础, 综合降本 7%~10%
- 交钥匙产品, 缩短施工周期, 减少施工成本

电路框图



技术指标

指标	型号	SPI1000K-TS	SPI2000K-TS
直流侧输入			
最大光伏阵列功率		1123kWp	2×1123kWp
最大光伏阵列开路电压		1000Vdc	
最大直流电流		1404A	2×1404A
输入路数		11~14 (可选)	22~28 (可选)
输入电压范围		720Vdc~950Vdc	
交流侧输出			
额定输出功率		1000kW	2000kW
最大输出功率		1100kW	2200kW
最大输出电流		63.51A	127.02A
电网电压		10kV/35kV	
额定电网频率		50Hz/60Hz	
功率因数 (额定功率下)		>0.99	
功率因数可调节范围		0.8 (超前) ~0.8 (滞后)	
总电流波形畸变率 (THDi)		<3% (额定功率)	
效率			
最大效率		99.00%	
欧洲效率		98.90%	
其他功能			
零 / 低电压穿越功能		具备	
交流侧并网技术		具备	
PID 修复功能		具备	
故障录波诊断功能		具备	
IV 曲线智能诊断功能		具备	
在线升级功能		具备	
箱变测控装置		具备	
基本参数			
尺寸 (宽 × 高 × 深)		4000×2990×2438mm	4200×2990×2800mm
重量		10000kg	15000kg
防护等级		IP54	
箱变布置形式		欧式 / 美式	
变压器冷却方式		ANAF/ONAN	
逆变器冷却方式		智能强制风冷	
工作海拔		2000m 标准 (>2000m 可选)	
工作环境温度		-35°C ~60°C	
工作环境湿度		0~95%, 无冷凝	
通讯接口		RS485、以太网、光纤环网 (选配)	

*规格指标若有变动, 恕不另行通知。

Central-distributed Inverter & Step-up Container Solution

SPI1000K-TS/SPI2000K-TS



Lower Investment, Higher Income

- Copper bar connection between inverter and transformer, line loss reduced by 0.1%~0.3%
- Optimize low-voltage distribution, cable connection and installation, and total cost reduce 7%-10%
- Turnkey product, shorten construction period, reduce construction cost

Product Features

Highly Integrated - turnkey Solution

- Integrated with efficient tri-level centralized PV inverter
- Equipped with transformer (10kV/35kV, Oil / Dry optional), medium voltage distribution
- Integrated multi-function transformer measurement and control device, one-stop solar farm communication solution

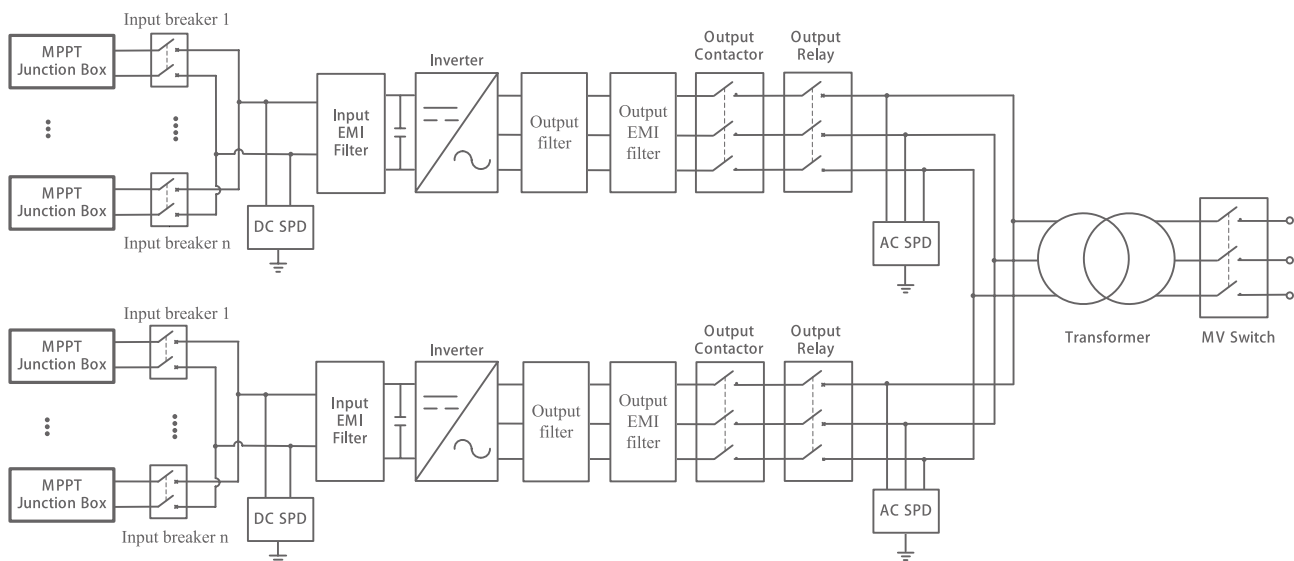
Efficient and Stable --Reliable

- Container standardization production, good consistency
- Unified and one-stop after-sale service
- Optimized inverter and step up unit, higher system efficiency
- 45° C 1.1 times long-term overload, 50° C full load operation

Lean Intelligence -full Monitoring Collection

- Integrated multi-function transformer measurement and control device, intelligent operation management
- Collect the combiner box, inverter and transformer information, quickly and accurately locate the fault
- Unified external communication interface, integrated lean management, rapid deployment and debugging

Function Diagram



Technical Specification

Index	Item	SPI1000K-TS	SPI2000K-TS
DC Input			
Max. PV Power		1123kWp	2×1123kWp
Max. PV Input Voltage		1000Vdc	
Maximum DC Current		1404A	2×1404A
PV Input Strings Number		11~14 (optional)	22~28 (optional)
Input Voltage Range		720Vdc~950Vdc	
AC Output			
Nominal AC Output Power		1000kW	2000kW
Maximum Output Power		1100kW	2200kW
Maximum Output Current		63.51A	127.02A
Nominal AC Voltage		10kV/35kV	
Nominal Grid Frequency		50Hz/60Hz	
Power Factor (nominal power)		>0.99	
PF Adjustable Range		0.8 (leading)~0.8 (lagging)	
THDi		<3% (nominal power)	
Efficiency			
Max. Efficiency		99.00%	
European Efficiency		98.90%	
Others			
LVRT Function		Yes	
AC Side Parallel Technology		Yes	
PID Repair		Yes	
Fault Wave Record Diagnosis		Yes	
IV Curve Intelligent Diagnostic Function		Yes	
Online Upgrade		Yes	
Transformer Measurement and Control Device		Yes	
System Data			
Dimensions (W×H×D)		4000×2990×2438mm	4200×2990×2800mm
Weight		10000kg	15000kg
IP Grade		IP54	
Transformer Type		Oil type/Dry type	
Transformer Cooling		ANAF/ONAN	
Inverter Cooling		Intelligent forced air cooling	
Altitude		2000m (>2000m optional)	
Operating Temperature Range		-35°C ~60°C	
Operating Humidity		0~95% (Non-condensation)	
Communication		RS485, Ethernet, FDDI (optional)	

* Specifications are subject to change without prior notice.