

# 集中式光伏逆变器(隔离型)

SPI250K-A/SPI500K-A



## 产品特点

### 高效发电

- 采用先进的 MPPT 控制技术, 最高转换效率可达 97.8%
- 45 °C 1.1 倍长期过载, 50 °C 满载运行

### 精益智能

- 智能故障录波功能, 快速故障分析
- 智能远程在线升级功能, 便于系统的升级与维护管理

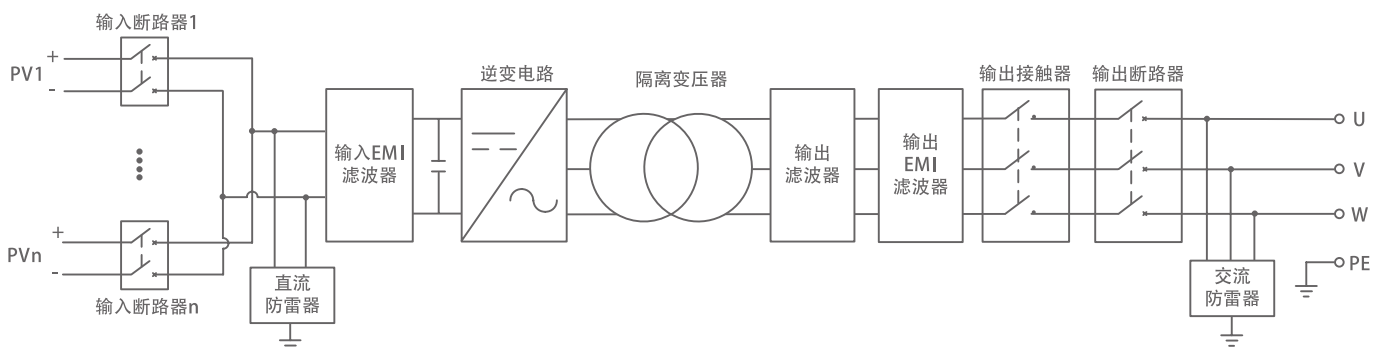
### 安全可靠

- 适应高海拔、高温、极寒等复杂环境
- 采用 DSP+CPLD 控制架构, 安全可靠
- 采用薄膜电容长寿命设计

### 节约投资

- 模块化设计, 节约运维成本
- 具备高效工频隔离变压器, 满足低压并网条件

## 电路框图



## 技术指标

指标	型号	SPI250K-A	SPI500K-A
<b>直流侧输入</b>			
最大光伏阵列功率		280kWp	560kWp
最大光伏阵列开路电压		1000Vdc	
最大直流电流		600A	1200A
输入组数		4	8
MPPT 路数		1	1
MPPT 电压跟踪范围		460Vdc~850Vdc	
启动电压		480Vdc	
MPPT 效率		99.90%	
<b>交流侧输出</b>			
额定输出功率		250kW	500kW
最大输出功率		275kW	550kW
最大输出电流		418A	836A
额定电网电压		380Vac	
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		0.9 (超前) ~0.9 (滞后)	
总电流波形畸变率 (THDi)		<3% (额定功率)	
隔离类型		高效工频变压器	
<b>效率</b>			
最大效率		>97.80%	
欧洲效率		>97.30%	
<b>其他功能</b>			
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	
在线升级功能		具备	
<b>基本参数</b>			
尺寸 (宽 × 高 × 深)		1000×2000×800mm	1400×2000×1000mm
重量		1500kg	2200kg
防护等级		IP20	
夜间损耗		<20W	
冷却方式		温控强制风冷	
最高工作海拔		6000m (>3000m 降额)	
工作环境温度		-35°C ~60°C	
工作环境湿度		0~95%, 无冷凝	
显示		LCD 触摸屏	
通讯		RS485、以太网 (选配)	

\*规格指标若有变动, 恕不另行通知。

# Centralized PV Inverter (with Isolation Transformer)

SPI250K-A/SPI500K-A



## Product Features

### High Efficiency

- Advanced MPPT, maximum conversion efficiency 97.8%
- 45°C 1.1 times the long-term overload, 50°C full load operation

### Lean Intelligence

- Intelligent fault recording function, quick failure analysis
- Intelligent online upgrade function, easy system upgrade and maintenance management

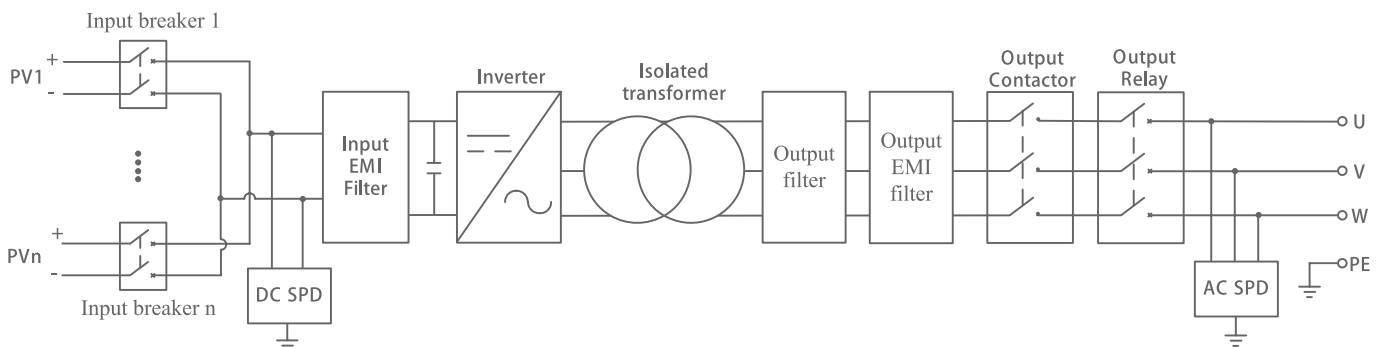
### Safe and Reliable

- Adapt to high altitude, high temperature, extreme cold and other complex environment
- DSP+CPLD control structure, safe and reliable
- Long life design of thin film capacitor

### Cost Saving

- Modular design, saving operation and maintenance cost
- Integrated ighh efficient isolation transformer, realize low-voltage grid connection directly

## Function Diagram



## Technical Specification

Index	Item	SPI250K-A	SPI500K-A
<b>DC Input</b>			
	Max. PV Power	280kWp	560kWp
	Max. PV Input Voltage	1000Vdc	
	Max. PV Input Current	600A	1200A
	No. of Inputs	4	8
	No. of MPPTs	1	1
	MPPT Voltage Range	460Vdc~850Vdc	
	Start up Voltage	480Vdc	
	MPPT Efficiency	99.90%	
<b>AC Output</b>			
	Nominal AC Output Power	250kW	500kW
	Maximum Output Power	275kW	550kW
	Maximum Output current	418A	836A
	Nominal AC Voltage	380Vac	
	Nominal Grid Frequency	50Hz/60Hz	
	Power Factor (nominal power)	>0.99	
	Power Factor Adjustable Range	0.9 (leading)~0.9 (lagging)	
	THDi	<3% (nominal power)	
	Isolation Type	High efficient transformer	
<b>Efficiency</b>			
	Max. Efficiency	>97.80%	
	European Efficiency	>97.30%	
<b>Others</b>			
	AC Side Parallel Technology	Yes	
	PID Repair	Yes	
	Fault Wave Record Diagnosis	Yes	
	Online Upgrade	Yes	
<b>System Data</b>			
	Dimensions (W×H×D)	1000×2000×800mm	1400×2000×1000mm
	Weight	1500kg	2200kg
	IP Grade	IP20	
	Night Consumption	<20W	
	Cooling	Intelligent forced air cooling	
	Altitude	6000m (>3000m derating)	
	Operating Temperature Range	-35°C ~60°C	
	Operating Humidity	0~95% (Non-condensation)	
	Display	LCD	
	Communication	RS485, Ethernet (optional)	

\* 120V/208V 277V/480V On-grid inverter for South and North American Markets are available for customization.  
\* Specifications are subject to change without prior notice.