



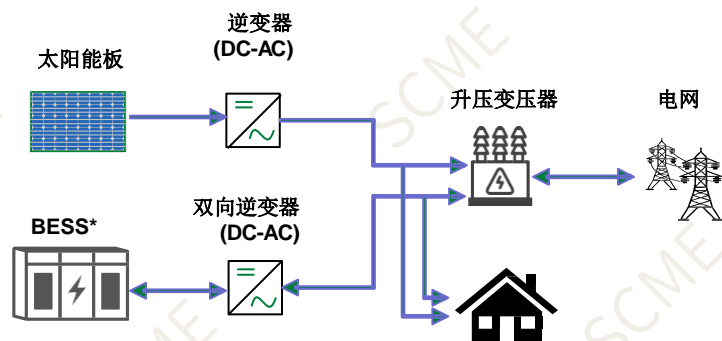
至晟品质 芯驰未来

PV光伏逆变& BESS储能保护

晟驰市场部

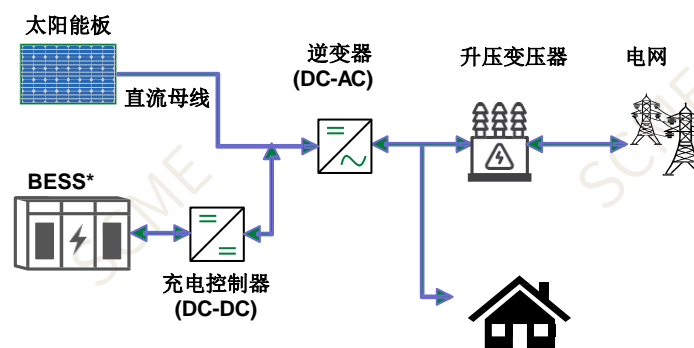
汇报时间：2022年8月12日

PV(太阳能光伏)&BESS(电池能量存储系统) 拓扑结构



PV太阳能逆变和BESS逆变分离

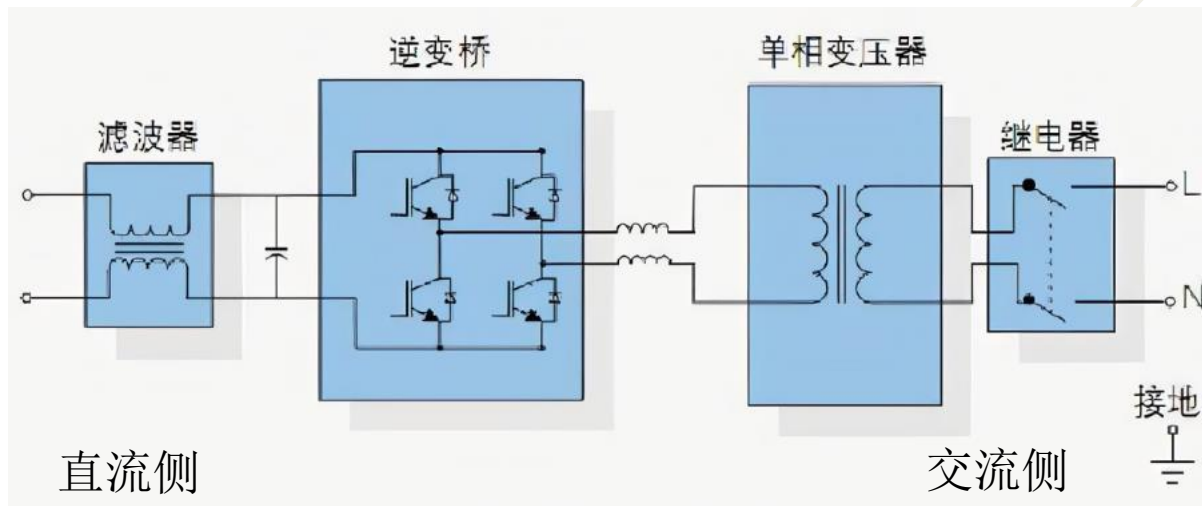
- 易于安装
- 效率低些, 经过多道转换



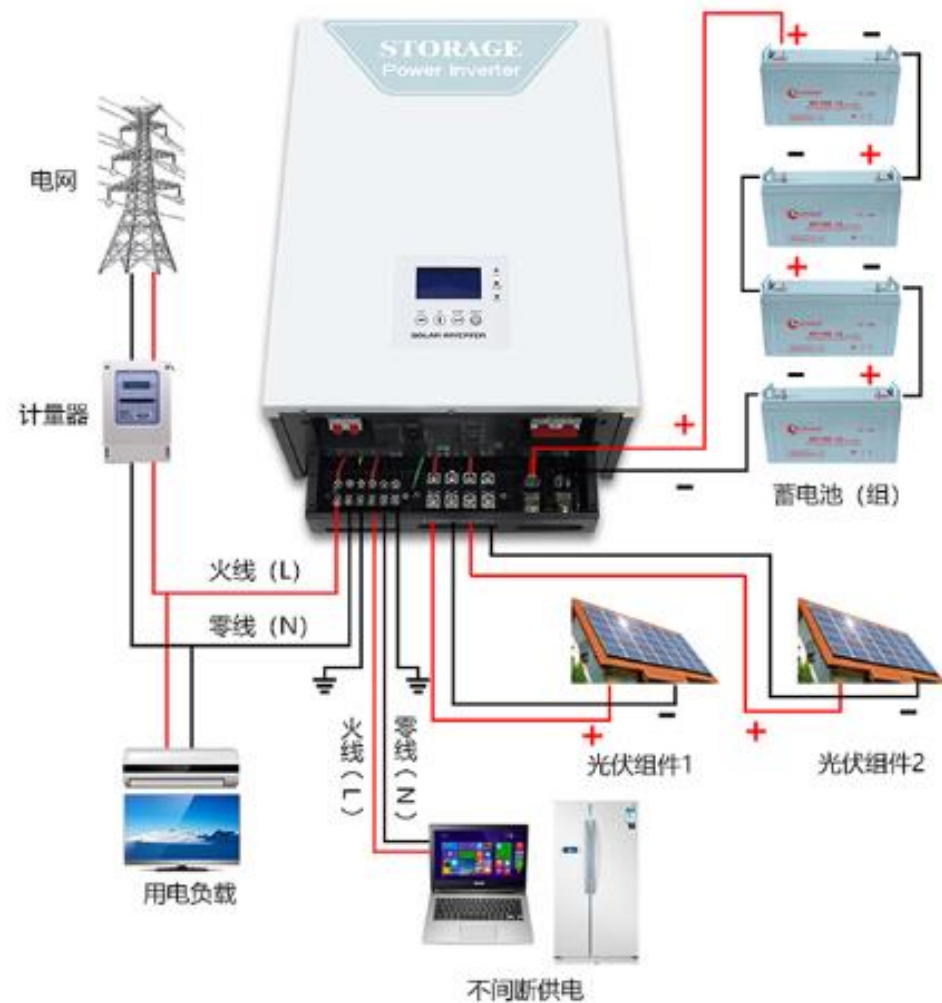
PV太阳能和BESS逆变共用

- 安装复杂些
- 效率高些

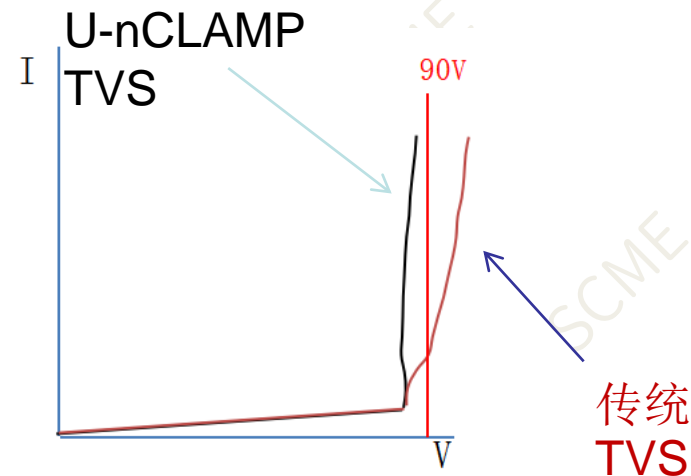
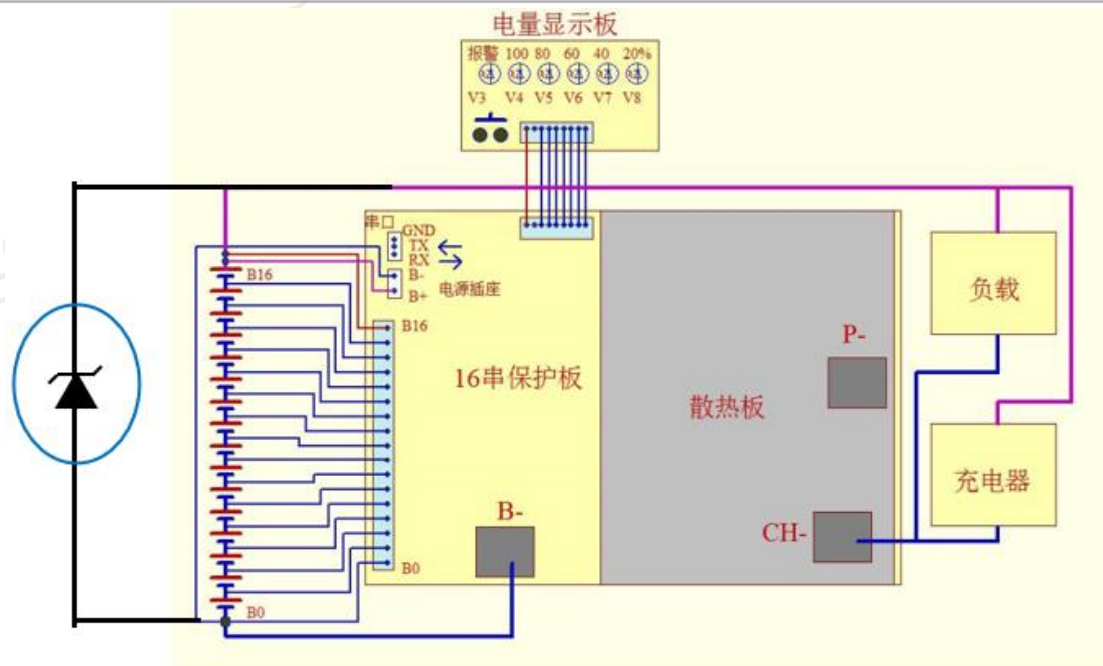
PV&BESS储能逆变器保护(以单相举例)



	TVS	备注
IGBT Vge	SMBJ18CA	
IGBT Vcg	P6SMB440A P6SMB480A P6SMB510A P6SMB530A	有源钳位保护
继电器侧	30KPA360CA	L/N接负载的时候

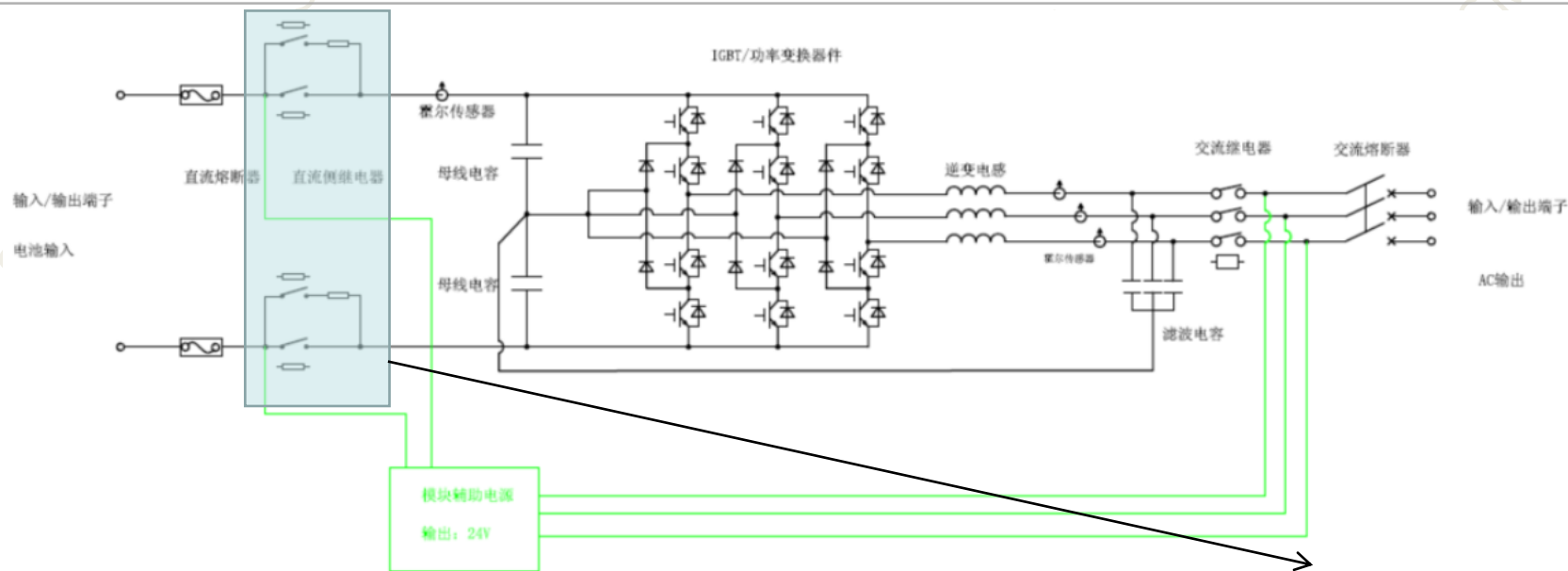


BMS电池管理系统保护

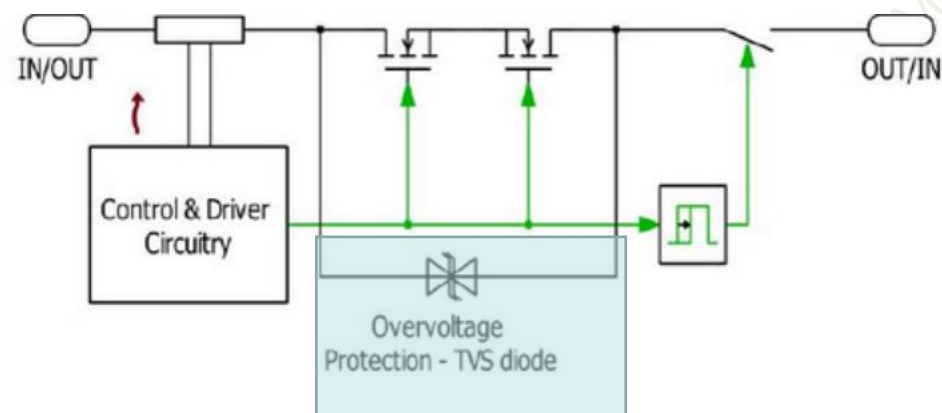


电池	14串	16串	保护	低钳位技术	Vbr中心值	10/1000uS Vc	8/20uS Vc
磷酸铁锂 (BYD)	单节3.7V	单节3.2V	TPSMD75A-VBR-Un	U-nCLAMP™	75V	<75V	<90V
三元锂电池 (CATL)		单节4.2V	TPSMD91A-VBR-Un	U-nCLAMP™	91V	<91V	<110V

BESS储能逆变器中高压直流断路器保护

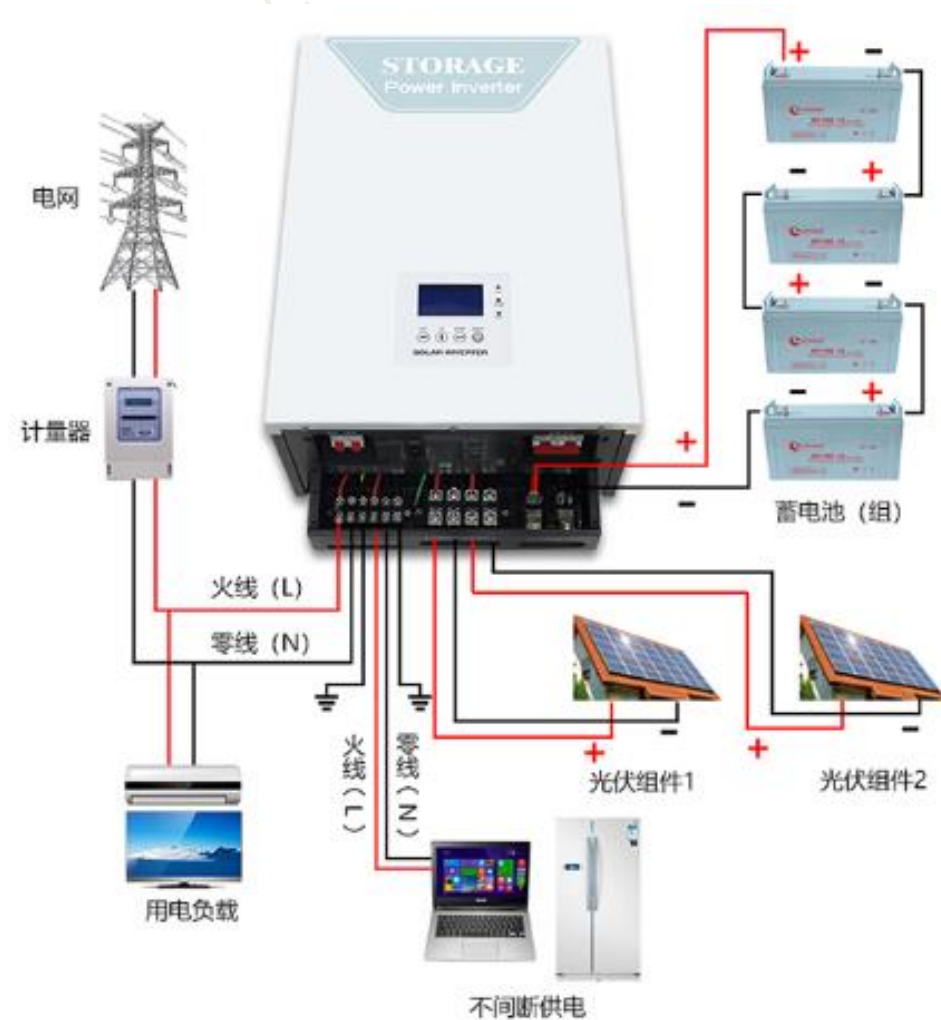


	TVS	
MOSFET两端	LTKAK3系列 或30KPA系列串并联	电压取决于客户

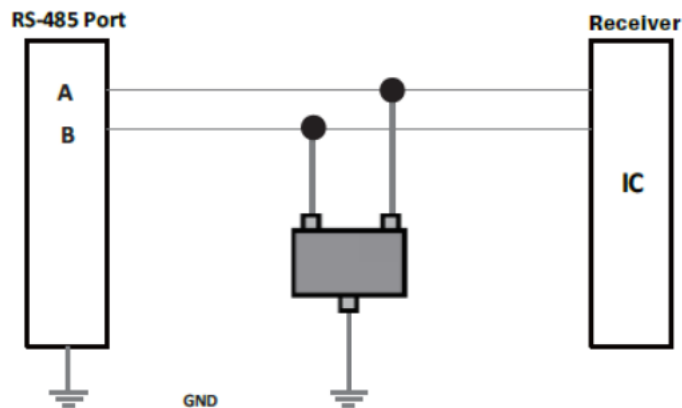


逆变器辅助电源保护

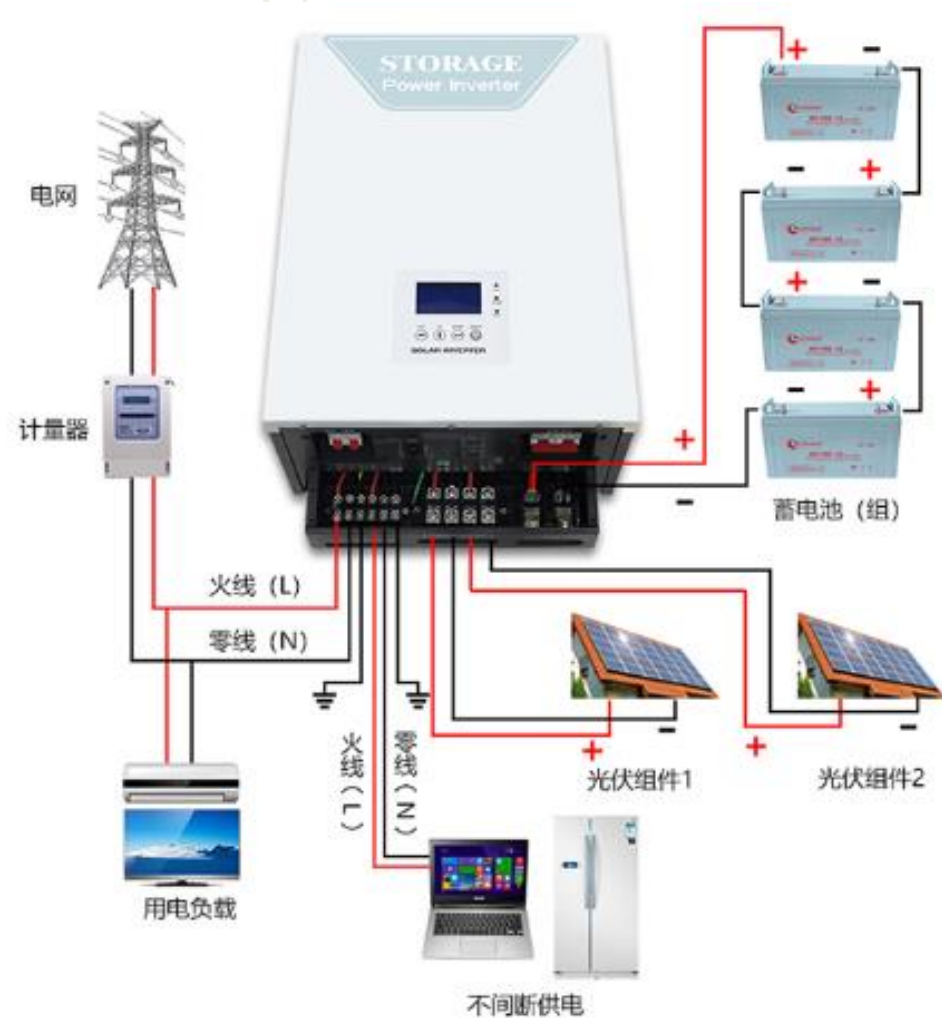
	TVS	备注
5V DC	SMAJ5.0A SMBJ5.0A	
12V DC	SMAJ12A SMBJ12A	
24V DC	SMAJ24A SMBJ24A	



PV&BESS 系统通信RS-485保护



	ESD	TVS	备注
RS-485	CSH712E2B		ESD
RS-485		SMBJ7.0CA	具备浪涌2kV 1.2/50uS 浪涌能力



THANK YOU!

感谢您的观看!



至晟品质 芯驰未来