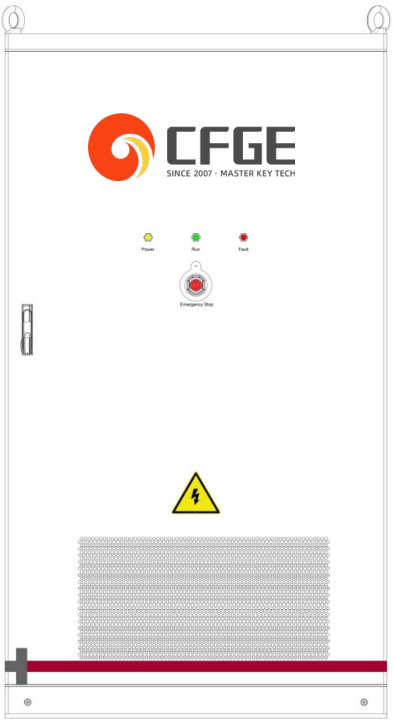


500 kW 并离网切换柜

500 kW STS Grid Transfer Cabinet

内置 STS　Integrated STS

面向户外储能系统的并离网切换与配电集成柜，支持接入两台或以上储能柜。集成 STS 自动切换、UPS 系统、浪涌保护及断路器保护，在 500 kW 电网侧总功率范围内统筹负载用电与储能充电。

An outdoor transfer and distribution cabinet for two or more energy storage cabinets. Integrated STS, UPS, surge protection and circuit breakers coordinate load supply and battery charging within a 500 kW grid-side power budget.

产品亮点 Product Highlights

快速切换 并网转离网时间 < 20 ms

Fast transfer | On-grid to off-grid transfer in < 20 ms

灵活接入 两台或以上储能柜 按实际充电需求配置

Flexible integration | Two or more storage cabinets, sized to charging demand

集成保护 分励脱扣 浪涌保护 急停与状态指示

Integrated protection | Shunt trip, surge protection, emergency stop and status indication

户外部署 IP55 防护 下进下出 便于现场布线

Outdoor installation | IP55 enclosure with bottom cable entry and exit

交流接入参数 AC Connection Specifications

参数 Parameter	规格 Specification
柜体额定电压 Cabinet rated voltage	400 V AC
储能柜接入数量 Storage cabinets connected	≥ 2 台 / Two or more 以实际充电功率需求而定 Subject to actual charging power requirements
STS 电网侧最大功率 STS grid-side max. power	500 kW
STS 电网侧额定电流 STS grid-side rated current	722 A
储能侧最大充电功率 Max charging power of energy storage	250 kW
负载侧最大功率 Max load-side power	250kW

500 kW 并离网切换柜

500 kW On-Grid and Off-Grid Transfer Cabinet

内置 STS　Integrated STS

功率分配与接入 Power Allocation and Integration

电网侧总功率为 500 kW，储能侧最大充电功率为 250 kW，负载侧最大功率为 250 kW。接入两台以上储能柜时，按储能侧总充电功率统筹分配；降低单台储能柜充电功率，可增加接入数量。

The grid-side power budget is 500 kW, with maximum battery charging power of 250 kW and maximum load-side power of 250 kW. When more than two storage cabinets are connected, charging is allocated within the aggregate storage-side limit. Reducing charging power per cabinet allows more cabinets to be connected.

STS 自动切换 Automatic Transfer with STS

参数 Parameter	规格 Specification
STS 型号 STS model	ESTS500-M
并网转离网时间 On-grid to off-grid transfer	< 20 ms
STS 电压及允许范围 STS voltage / tolerance	380 / 400 Vac；±15%
STS 额定频率 STS rated frequency	50 / 60 Hz，±5 Hz
STS 通信接口 STS communication	RS485 / CAN / Ethernet

保护与辅助配置 Protection and Auxiliary Equipment

参数 Parameter	规格 Specification
电网总断路器 QF1 Grid main breaker	400 Vac / 1000 A；分励脱扣 / Shunt trip
1#储能断路器 QF2 1#storage breakers	400 Vac / 250 A
2#储能断路器 QF3 2#storage breakers	400 Vac / 250 A
负载断路器 QF4 Load breakers	400 Vac / 500 A
浪涌保护器 Surge protective device	Type II;20kA/40kA;4P
辅助电源与备用供电 Auxiliary / backup supply	AC 220 V / DC 24 V，240 W；24 V 备用电池 24 V backup battery
急停与状态指示 Emergency stop / indication	急停按钮；电源、运行、故障指示 Emergency stop; power, run and fault indicators

柜体与安装 Enclosure and Installation

参数 Parameter	规格 Specification
外形尺寸 宽 × 深 × 高 Dimensions W × D × H	1,200 × 1,350 × 2,150 mm
整柜重量 Cabinet weight	1,100 ± 10 kg
整柜防护等级 Cabinet ingress protection	IP55
安装位置 / 工作海拔 Location / operating altitude	户外 / Outdoor；≤ 2,000 m
电缆进出线 Cable entry / exit	下进下出 / Bottom entry and exit