



众智科技
SmartGen

SmartGen 众智

MAKING CONTROL SMARTER
Stock Code 股票代码301361

ATSE PRODUCT CATALOGUE 智能切换产品选型样册

SMARTGEN(ZHENGZHOU) TECHNOLOGY CO., LTD.

www.smartgen.com.cn

www.smartgen.cn

SmartGen 众智

郑州众智科技股份有限公司
SMARTGEN(ZHENGZHOU) TECHNOLOGY CO., LTD.

地址: 中国.河南省郑州市高新区雪梅街28号

Add: No. 28 Xuemei Street, Zhengzhou, Henan, China

Tel: +86-371-67988888/67981888/67981000(overseas)

Web: www.smartgen.com.cn / www.smartgen.cn

股票名称: 众智科技 Stock name: ZZKJ

股票代码: 301361 Stock code: 301361



China Offices

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MAKING CONTROL SMARTER | 2025

SMARTGEN(ZHENGZHOU) TECHNOLOGY CO., LTD.



COMPANY PROFILE

众智科技SmartGen

始建于 ESTABLISHED IN 1998 1998	公司总部 HEADQUARTERS: ZHENGZHOU, CHINA 中国·郑州	工厂面积 TOTAL FACTORY AREA OVER 60,000m² 6万平	研发投入 R&D INVESTMENTS OVER 10% 10%⁺
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SmartGen was founded in 1998, a listed company on the China Stock Exchange, which is mainly engaged in the research and development, manufacture, sales, and services of automatic control systems for Engine, Generator and Genset, Low-voltage Distribution, New Energy, and other related fields. The products are widely used in mining, oil exploitation, data centers, ships, intelligent buildings, banks, hospitals, factories, telecom, infrastructure, and other fields, with business covering the world. The company is a high-growth, high-tech, modern, and technology-intensive enterprise. To stay ahead of the curve in the domestic and international markets, the company has invested heavily in R&D, standard testing center, and digital factory every year since its establishment. We have hundreds of patents, and over 30% of the employees are dedicated to research and development, and exploring new intelligent solutions to improve the overall performance of global industrial equipment. We will continue to innovate and self-transcend as always, improve our core competitiveness, enhance the value of enterprises and employees, create a complete industrial ecological chain of high quality, safe, green, low-carbon, and sustainable development, and return our customers, shareholders, employees, and society.

众智科技始建于1998年，深交所创业板（股票代码301361）上市企业，主要从事发动机自动控制系统、发电机和发电机组自动控制系统、低压配电自动控制系统、新能源自动控制系统等相关自动化产品的研发、制造、销售和服务。公司产品广泛应用于矿山石油开采、数据中心、船舶、智能大厦、银行、医院、工厂、电信、基建等领域，业务范围遍布全球。公司是国家专精特新“小巨人”企业，是高成长性、高新技术企业，也是技术密集型现代化企业。自成立以来，每年都会在产品研发、标准实验室、数字工厂方面投入大量资金，以保持公司在国内国际市场中的领先地位。我们拥有数百项专利，有超过30%的员工致力于研发工作，负责探索全新的智能化方案来提升全球行业设备的整体性能。我们将一如既往地不断创新与自我超越，持续提高核心竞争力，提升企业和员工价值，打造优质、安全、绿色、低碳等可持续发展的完整产业生态链，以优质的业绩回报客户、回报股东、回报员工、回报社会！

深交所创业板上市企业 / 股票代码：301361.sz

A Listed public company in China / Stock Code: 301361.sz

集研发、制造、销售、服务为一体的科技型现代化公司

A modern technology-driven company integrating R&D, manufacture, sales and services



产品测试中心Product Testing Center

SmartGen Testing Center was established in 2010, covering an area of nearly 1,000 square metres. With gradual improvements for years, it has become one of the handful of top-ranking testing bases in the industry. In order to meet the highest quality standard of various products, SmartGen Testing Center successively purchased sets of advanced test equipment from domestic and foreign well-known enterprises. Test types mainly include EMC tests, environmental tests, prototype tests, failure analysis test, product safety testing, product function test, reliability test, etc.

众智试验室筹建于2010年，占地面积近千平方米。历时多年的逐渐完善，目前已经成为了行业内屈指可数的一流试验基地。

众智试验室先后从国内外知名企业采购多套高精尖的测试设备，以确保各种产品符合最高品质标准。

主要测试类型包括：电磁兼容（EMC）试验、环境试验、真机试验、失效分析测试、产品安全测试、产品功能测试、可靠性测试等。

CCC认证
CCC certification

CE认证
CE certification

UL认证
UL certification

CCS（中国船级社）认证
CCS (China Classification Society) certification

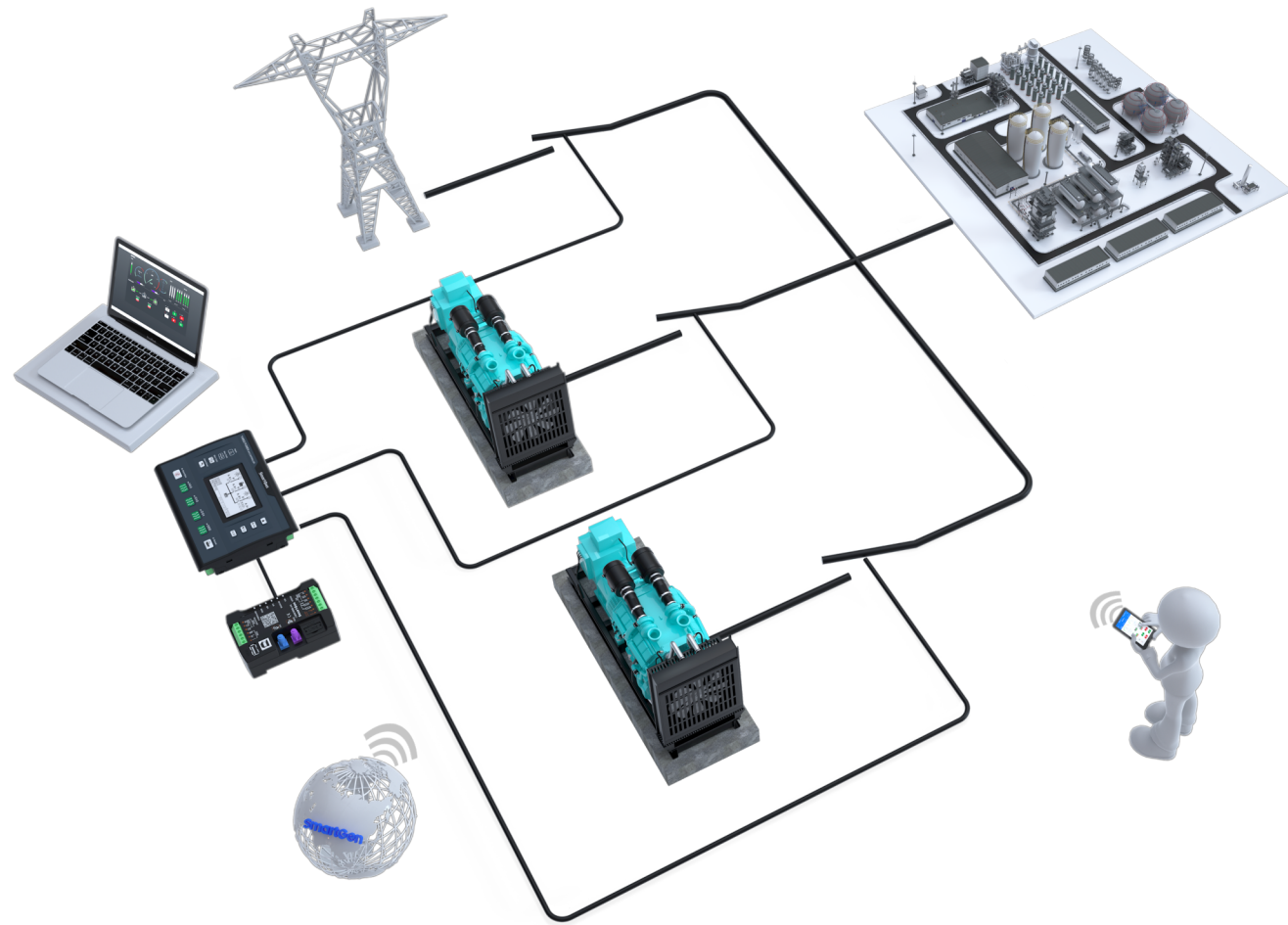
BV（法国船级社）认证
BV (Bureau Veritas) certification

ABS(美国船级社)认证
ABS(American Bureau of Shipping) certification



Three Power ATSE Solution

三电源智能切换解决方案

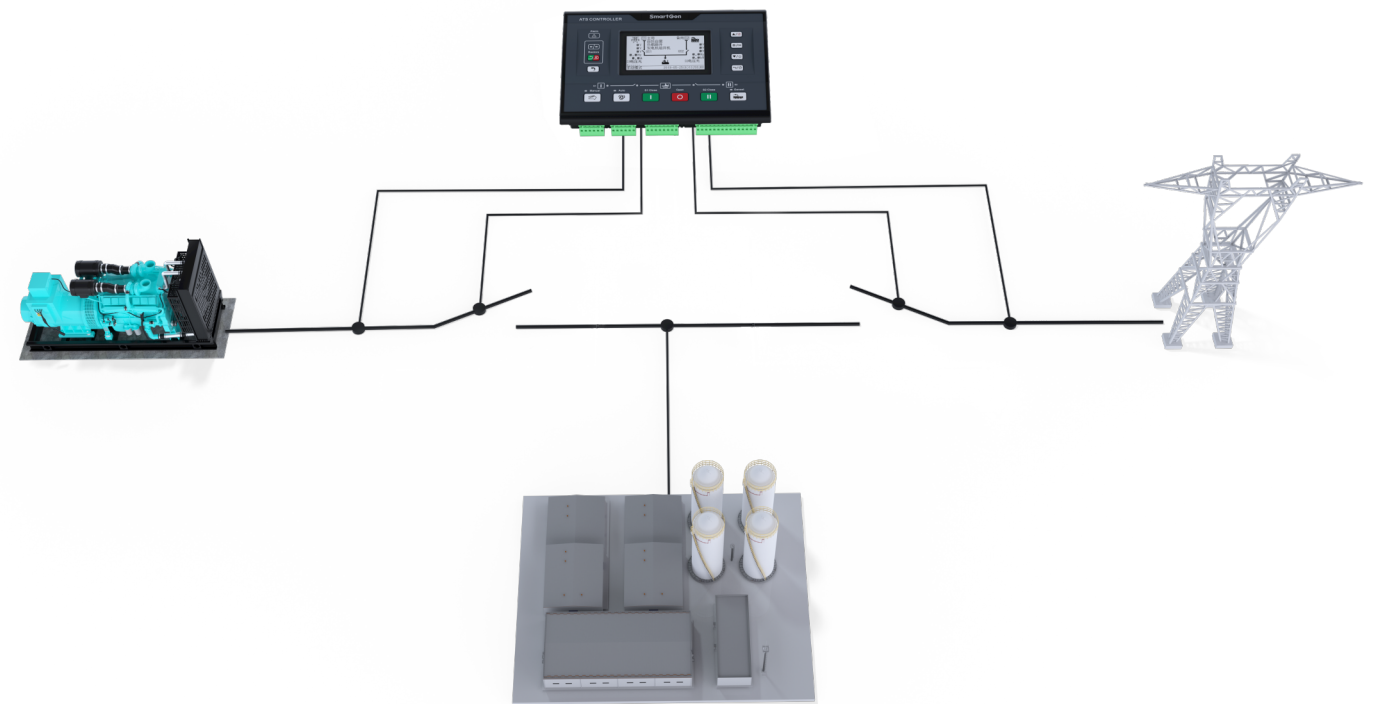


Smartgen Three Power ATSE Solution can provide smart control by three frame breakers or two ATSE in three-way power supply switching situation. It can realize uninterruptible power supply for key load by parallel switching solution(HAT833S).

Smartgen三电源智能切换解决方案，可提供三台框架断路器或两台ATS开关智能控制，满足三路电源切换需求。对核心关键负载，可提供并联切换方案（HAT833S），实现不间断供电。

Dual Power ATSE Solution

双电源智能切换解决方案

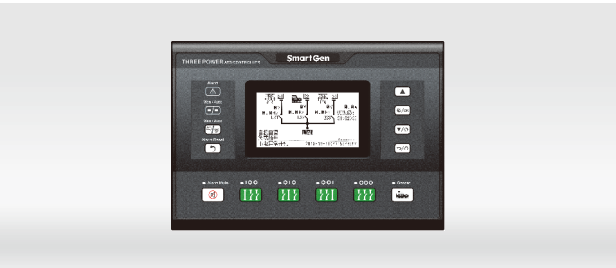
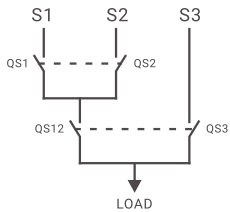


Smartgen Dual Power ATSE Solution can provide smart control and fast switching by various types of ATSE(PC, CB or CC class) to reduce power outage of the load. It can realize uninterruptible power supply for key load by parallel switching solution.

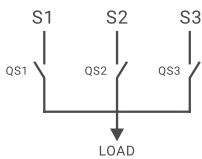
Smartgen双电源智能切换解决方案，可提供不同类型ATS开关的智能控制（如PC级、CB级、CC级）。快速切换方案，可减少负载断电时间；对核心关键负载，可提供并联切换方案，实现不间断供电。



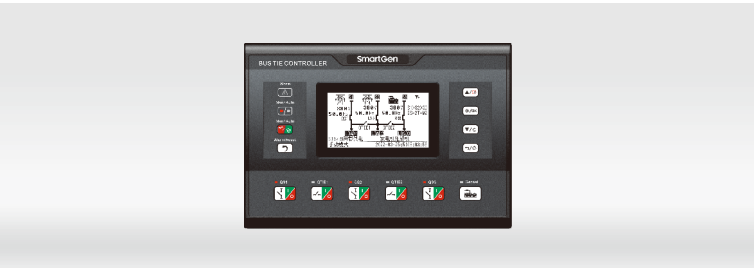
HAT832
Three Power ATS Controller
三电源自动切换控制器



HAT833/833S
Three Power ATS Controller
三电源自动切换控制器

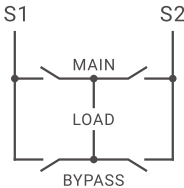
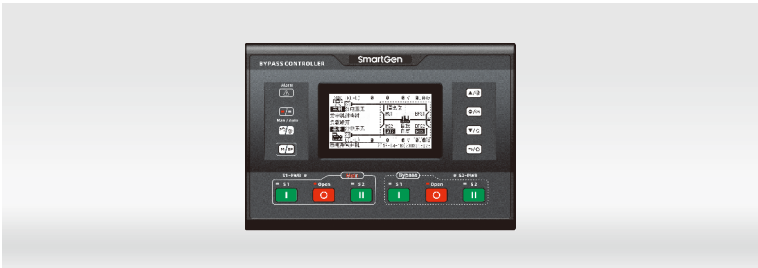


Model/型号	HAT832	HAT833	HAT833S
Main Functions 主要功能	Suitable for three power ATSE control system with two PC class ATS. 适用于两台PC级ATS开关组成的三电源智能切换控制系统。	Suitable for three power ATSE control system with three breakers.Adding parallel switching function on the basis of HAT833 function, HAT833S can realize uninterrupted switching closing and opening. 适用于三台断路器组成的三电源智能切换控制系统。HAT833S在HAT833的功能基础上增加了并联切换功能，可实现先合后分不间断切换。	
Display 显示	LCD(240*128)px 4.3Inches/吋		
Language 控制器语言	Chinese & English & Others/ 中文 & 英文 & 其他		
AC System 交流制式	1P2W/2P3W/3P3W(Special order required/需特殊订货)/3P4W		
AC Voltage Range 交流电压范围	AC(50~305)V(L-N)		
AC Frequency 交流频率	50/60Hz		
Current and Power Display 电流及功率显示	●		
Over Current Warn 过流警告	●		
Volt. Freq. Protection 电压频率保护	●		
Monitor Interface 监控接口	RS485-1/RS485-2		
Programming Interface 编程接口	USB/RS485-1/RS485-2		
Real-time Clock and Event Log 实时时钟及历史记录	●		
Scheduled Start Genset 定时试机	●		
Cycle Start Genset 循环开机	●		
Main Standby Transfer 主备用切换	●		
Synchronous Transfer 同步切换			●
Working Voltage 工作电压	DC(8~35)V/AC(90~305)V		
Programmable Input 可编程输入	8		
Programmable Output 可编程输出	12		
Case Dimensions 外形尺寸(mm)	260*180*54 (L*W*H)		
Panel Cutout 开孔尺寸(mm)	242*161		
Operating Temp. 工作温度	(-25~+70)°C		



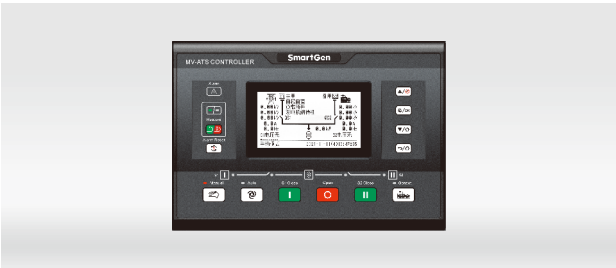
HAT835/835S
Three Power Bus Tie Controller
三电源母联智能切换控制器

Model/型号	HAT835	HAT835S
Main Functions 主要功能	HAT835 Three Power Bus Tie Controller is the module with configurable function, automatic measurement, LCD display, and digital communication. HAT835是一种具有可编程功能、自动化测量、LCD显示、数字通讯为一体的三路电源母联切换模块。	Adding parallel switching function on the basis of HAT835 function, which can realize uninterrupted switching closing and opening. HAT835S在HAT835的功能基础上增加了并联切换功能，可实现先合后分不间断切换。
Display/显示	LCD(240*128)px 4.3Inches/吋	
Language 控制器语言	Chinese & English & Traditional Chinese / 中、英、繁体中文	
AC System 交流制式	1P2W/2P3W/3P3W(Special order required / 需特殊订货)/3P4W	
AC Voltage Range 交流电压范围	AC(50~305)V(L-N)	
AC Frequency 交流频率	50/60Hz	
Volt. Freq. Protection 电压频率保护	●	
Monitor Interface 监控接口	RS485-1/RS485-2	
Programming Interface 编程接口	USB/RS485-1/RS485-2	
Real-time Clock and Event Log 实时时钟及历史记录	●	
Scheduled Start Genset 定时试机	●	
Cycle Start Genset 循环开机	●	
Main Standby Transfer 主备用切换	●	
Synchronous Transfer 同步切换		●
Working Voltage 工作电压	DC(8~35)V/AC(90~305)V	
Programmable Input 可编程输入	12	
Programmable Output 可编程输出	12	
Cass Dimensions 外形尺寸(mm)	260*180*54(L*W*H)	
Panel Cutout 开孔尺寸(mm)	242*161	
Operating Temp. 工作温度	(-25~+70)°C	



HAT880/880S
Dual Power Bypass Automatic Switching Controller
双电源旁路自动切换控制器

Model/型号	HAT880		HAT880S
Main Functions 主要功能	It can control various bypass switches, applies to single bypass, double bypass transfer switches, manual control or remote control (electrically operated) bypass switches; It has main/bypass switch button unlock and unlock status display function; It has main/bypass switch button manual control and automatic control switching function, and main/bypass switch status display.		It can control various bypass switches, applies to single bypass, double bypass transfer switches, manual control or remote control (electrically operated) bypass switches; It has main/bypass switch button unlock and unlock status display function; It has main/bypass switch button manual control and automatic control switching function, and main/bypass switch status display. Synchronous parallel switching function, the controller can track two electrical synchronization signals, instantaneous parallel connection to achieve uninterrupted switching.
	可控制多种旁路开关，适用于单旁路、双旁路转换开关，手动控制或远程控制(电动操作)旁路开关。具有主/旁路开关按键解锁和解锁状态显示功能；具有主/旁路开关按键手动控制和自动控制投切功能，以及主/旁路开关状态显示。		可控制多种旁路开关，适用于单旁路、双旁路转换开关，手动控制或远程控制(电动操作)旁路开关。具有主/旁路开关按键解锁和解锁状态显示功能；具有主/旁路开关按键手动控制和自动控制投切功能，以及主/旁路开关状态显示；同步并联切换功能，控制器可以追踪两路电同步信号，瞬间并联实现不间断切换。
Display/显示	LCD(240*128)px		4.3Inches/吋
Language 控制器语言	Chinese & English & Others/中文 & 英文 & 其他		
AC System 交流制式	1P2W/2P3W/3P3W(Special order required/需特殊订货)/3P4W		
AC Voltage Range 交流电压范围	AC(50~305)V(L-N)		
AC Frequency 交流频率	50/60Hz		
Current and Power Display 电流及功率显示			●
Over Current Warn 过流警告			●
Volt. Freq. Protection 电压频率保护			●
Monitor Interface 监控接口	RS485-1/RS485-2		
Programming Interface 编程接口	USB/RS485-1/RS485-2		
Real-time Clock and Event Log 实时时钟及历史记录			●
Scheduled Start Genset 定时试机			●
Cycle Start Genset 循环开机			●
Main Standby Transfer 主备用切换			●
Synchronous Transfer 同步切换			●
Working Voltage 工作电压	DC(8~35)V		AC(90~305)V
Programmable Input 可编程输入	8		
Programmable Output 可编程输出	12		
Cass Dimensions 外形尺寸(mm)	260*180*54 (L*W*H)		
Panel Cutout 开孔尺寸(mm)	242*161		
Operating Temp. 工作温度	(-25~+70)°C		

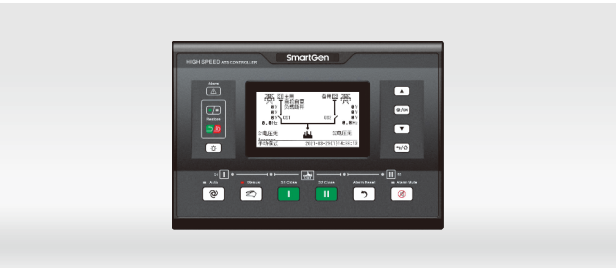


HAT860
Medium Voltage ATS Controller
中压双电源自动切换控制器

Model/型号	HAT860	HMU8-860
Main Functions 主要功能	HAT860 Medium Voltage ATS Controller is a module that integrates programmable function, automatic measurement, PT break detection, load stepwise switch, LCD display and digital communication. It can precisely detect 2-way 3-phase incoming voltage, make accurate judgment for voltage abnormal situations and output passive control coil. It can be widely used in the electric automatic control system of electric power, telecom, petrochemical industry, mining, railways, municipal administration, data center, intelligent building and other industries. 具有可编程功能、自动化测量、PT断线检测、负载逐级投切、LCD显示、数字通讯为一体的中压双电源切换模块。控制器可精确地检测两路三相进线电压，对出现的电压异常做出准确的判断并输出无源控制开关量。可广泛应用于电力、电信、石化、矿山、轨道交通、市政、数据中心、智能大厦等行业的电气自动控制系统。	HMU8-860 is used for the remote data monitoring and control of HAT860 MV-ATS controller. The two modules communicate via RS485 interface. HMU8-860用于HAT860中压双电源自动切换控制器的远程数据监测以及控制。两个模块之间通过RS485接口连接通信。
Display/显示	LCD(240*128)px	LCD(800*600)px 8Inches/吋
Language 控制器语言	Chinese & English & Others/中文 & 英文 & 其他	Chinese & English/中文 & 英文
AC System 交流制式	1P2W/2P3W/3P3W/3P4W	
AC Voltage Range 交流电压范围	AC(50~360)V(L-N)	
AC Frequency 交流频率	50/60Hz	
Current and Power Display 电流及功率显示	●	
Over Current Warn 过流警告	●	
Volt. Freq. Protection 电压频率保护	●	
Monitor Interface 监控接口	RS485-1/RS485-2	4-way RS485/4路RS485 CANBUS ETHERNET
Programming Interface 编程接口	RS485/USB	
Real-time Clock and Event Log 实时时钟及历史记录	●	
Scheduled Start Genset 定时试机	●	
Cycle Start Genset 循环开机	●	
Main Standby Transfer 主备用切换	●	
Working Voltage 工作电压	B+, B-端：DC12V/24V/48V PA, PN 端：AC(90~305)V 或 DC110V/DC220V	DC10V - DC35V
Programmable Input 可编程输入	12	
Programmable Output 可编程输出	13	
Cass Dimensions 外形尺寸(mm)	260*180*54 (L*W*H)	221*163*51 (L*W*H)
Panel Cutout 开孔尺寸(mm)	242*161	205*147
Operating Temp. 工作温度	(-25~+70)°C	

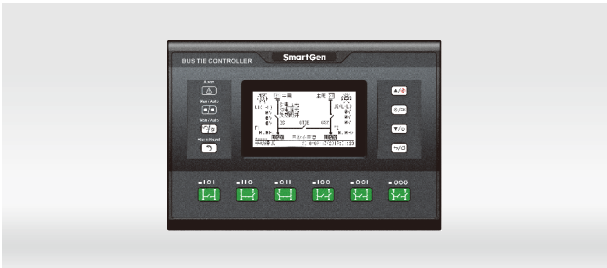


HMAT880
Medium Voltage ATS Controller
中压双电源自动切换控制器

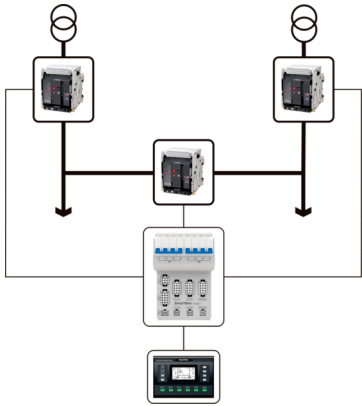


HAT828
High Speed ATS Controller
双电源快速切换控制器

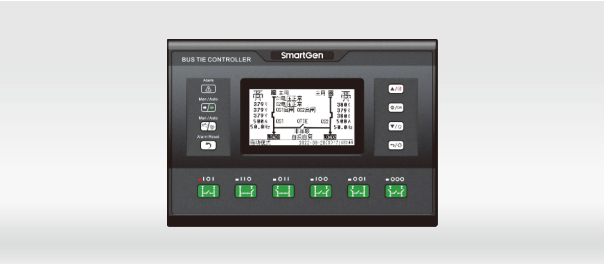
Model/型号	HMAT880		HAT828	
Main Functions 主要功能	Medium Voltage Bypass ATS Controller is a module that integrates programmable function, automatic measurement, PT break detection, load stepwise switch, LCD display and digital communication.		HAT828 High Speed ATS Controller is a dual power transfer module that can output switch transfer signals within 10 ms in the case of any power outage, and synchronously transfer when both power supplies are normal. It is suitable for PC two-stage transfer switch (high speed and normal). With embedded operation system.	
	中压双电源旁路自动切换控制器是一种具有可编程功能、自动化测量、PT 断线检测、负载逐级投切、LCD 显示、数字通讯为一体的中压双电源旁路切换模块。		HAT828是一款在任一路电源断电的情况下实现10毫秒内输出开关切换信号，并且在两路电源均不断电时进行同步转换的双电源切换模块，适用于PC二段式切换开关（快速与非快速切换）。	
Display/显示	LCD(240*128)px		4.3Inches/吋	
Language 控制器语言	Chinese & English & Others/中文 & 英文 & 其他			
AC System 交流制式	1P2W/2P3W/3P3W/3P4W			
AC Voltage Range 交流电压范围	AC(50~360)V(L-N)			
AC Frequency 交流频率	50/60Hz			
Current and Power Display 电流及功率显示	●			
Over Current Warn 过流警告	●			
Volt. Freq. Protection 电压频率保护			●	
Monitor Interface 监控接口	RS485-1/RS485-2			
Programming Interface 编程接口	USB/RS485-1/RS485-2			
Real-time Clock and Event Log 实时时钟及历史记录			●	
Scheduled Start Genset 定时试机			●	
Cycle Start Genset 循环开机			●	
Main Standby Transfer 主备用切换			●	
Working Voltage 工作电压	B+、B-端：DC12V/24V/48V PA、PN 端：AC(90~305)V 或 DC110V/DC220V		DC(8.0~35)V AC(90~576)V	
Programmable Input 可编程输入	12		8	
Programmable Output 可编程输出	13		10	
Cass Dimensions 外形尺寸(mm)	260*180*54 (L*W*H)			
Panel Cutout 开孔尺寸(mm)	242*161			
Operating Temp. 工作温度	(-25~+70)°C			



HAT821/821S
Bus Tie Controller
母联控制器



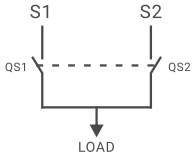
Model/型号	HAT821		HAT821S
Main Functions 主要功能	Suitable for ATSE control system with two incoming lines and one bus-tie(low voltage standby self-switchover). 适用于两进线一母联（低压备自投）的电源切换控制系统。		Adding parallel switching function on the basis of HAT821 function, which can realize uninterrupted switching closing and opening. 在HAT821功能基础上增加了并联切换功能，可实现先合后分不间断切换。
Display/显示	LCD(240*128)px 4.3Inches/吋		
Language 控制器语言	Chinese & English & Others/中文 & 英文 & 其他		
AC System 交流制式	1P2W/2P3W/3P3W(Special order required/需特殊订货)/3P4W		
AC Voltage Range 交流电压范围	AC(50~305)V(L-N)		
AC Frequency 交流频率	50/60Hz		
Volt. Freq. Protection 电压频率保护	●		
Monitor Interface 监控接口	RS485-1/RS485-2		
Programming Interface 编程接口	USB/RS485-1/RS485-2		
Real-time Clock and Event Log 实时时钟及历史记录	●		
Main Standby Transfer 主备用切换	●		
Synchronous Transfer 同步切换		●	
Working Voltage 工作电压	DC(8~35)V/AC(90~305)V		
Programmable Input 可编程输入	8		
Programmable Output 可编程输出	12		
Case Dimensions 外形尺寸(mm)	260*180*54 (L*W*H)		
Panel Cutout 开孔尺寸(mm)	242*161		
Operating Temp. 工作温度	(-25~+70)°C		



HAT821SI
Dual Power Bus Tie Controller
双电源母联自动切换控制器



HAT820/820S
ATSE Synchronous Switching Controller
ATSE同步切换控制器

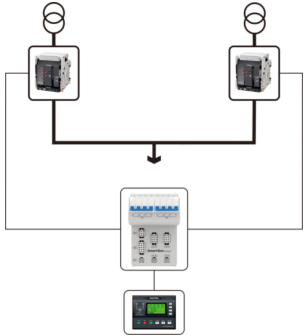


Model/型号	HAT821SI
Main Functions 主要功能	HAT821SI Dual Power Bus Tie Controller is a medium voltage ATS module that integrates configurable function, automatic measurement, PT break detection, load stepwise transfer, intelligent unloading, parallel transfer and loop closing, LCD display and digital communication. HAT821SI是一种具有可编程功能、自动化测量、PT断线检测、负载逐级投切、负荷智能卸载、并联转换和合环功能、LCD显示、数字通讯为一体的双电源母联自动切换模块。
Display/显示	LCD(240*128)px 4.3Inches/吋
Language 控制器语言	Chinese & English & Others/中文 & 英文 & 其他
AC System 交流制式	1P2W/2P3W/3P3W/3P4W
AC Voltage Range 交流电压范围	AC(50~360)V(L-N)
AC Frequency 交流频率	50/60Hz
Current and Power Display 电流及功率显示	●
Over Current Warn 过流警告	●
Volt. Freq. Protection 电压频率保护	●
Monitor Interface 监控接口	RS485-1/RS485-2
Programming Interface 编程接口	USB/RS485-1/RS485-2
Real-time Clock and Event Log 实时时钟及历史记录	●
Scheduled Start Genset 定时试机	●
Synchronous Transfer 同步切换	●
Working Voltage 工作电压	B+、B-端：DC12V/24V/48V PA、PN 端：AC(90~305)V 或 DC110V/DC220V
Programmable Input 可编程输入	12
Programmable Output 可编程输出	13
Case Dimensions 外形尺寸(mm)	260*180*54 (L*W*H)
Panel Cutout 开孔尺寸(mm)	242*161
Operating Temp. 工作温度	(-25~+70)°C

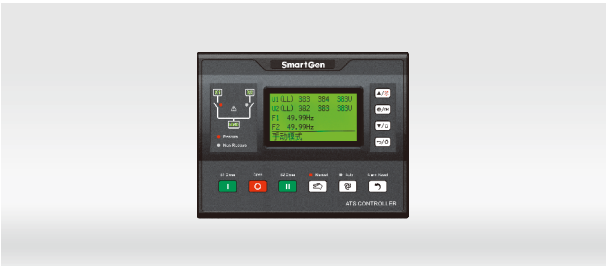
Model/型号	HAT820	HAT820S
Main Functions 主要功能	It can control various PC dual power switch, CB dual power switch. The controller can be powered by line voltage (L-L), with load voltage detection, temperature detection in cabinet, (fire cut) source input and other functions. 可控制各种PC级双电源开关，CB级双电源开关。控制器可以线电压(L-L)供电、具有负载电压检测、柜内温度检测、(消防切非)有源输入等功能。	Based on the HAT820 function, increase the short-time Synchronous switching function; The controller can track two electrical synchronization signals and instantaneously connect in parallel to achieve uninterrupted switching. 在HAT820功能基础上，增加短时同步切换功能；控制器可以追踪两路电同步信号，瞬间并联，实现不间断切换。
Display显示	LCD(240*128)px 4.3Inches/吋	
Language 控制器语言	Chinese & English & Others/中文 & 英文 & 其他	
AC System 交流制式	1P2W/2P3W/3P3W/3P4W	
AC Voltage Range 交流电压范围	AC(50~360)V(L-N)	
AC Frequency 交流频率	50/60Hz	
Current and Power Display 电流及功率显示	●	
Over Current Warn 过流警告	●	
Volt. Freq. Protection 电压频率保护	●	
Monitor Interface 监控接口	RS485-1/RS485-2	
Programming Interface 编程接口	USB/RS485-1/RS485-2	
Real-time Clock and Event Log 实时时钟及历史记录	●	
Scheduled Start Genset 定时试机	●	
Cycle Start Genset 循环开机	●	
Main Standby Transfer 主备用切换	●	
Synchronous Transfer 同步切换		●
Working Voltage 工作电压	DC(8~35)V/AC(90~576)V	
Programmable Input 可编程输入	9	
Programmable Output 可编程输出	12	
Case Dimensions 外形尺寸(mm)	260*180*54 (L*W*H)	
Panel Cutout 开孔尺寸(mm)	242*161	
Operating Temp. 工作温度	(-25~+70)°C	



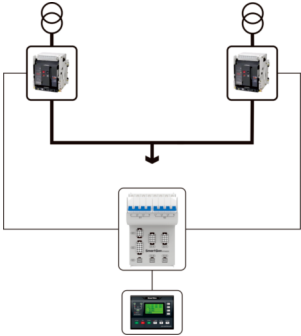
HAT600R(RB/RI/RBI/RS)
Dual Power ATS Controller
双电源自动切换控制器



Model/型号	HAT600R	HAT600RB	HAT600RI	HAT600RBI	HAT600RS
Main Functions 主要功能	DC supply. With load voltage monitoring, in-phase transfer, fast transfer function; Standard RS485 and USB interface. 直流供电。具有负载电压监测、同相位切换、快速切换功能；标配RS485和USB接口。	AC/DC supply. With load voltage monitoring, in-phase transfer, fast transfer function; Standard RS485 and USB interface. 交/直流供电。具有负载电压监测、同相位切换、快速切换功能；标配RS485和USB接口。	DC supply, has current detection. With load voltage monitoring, in-phase transfer, fast transfer function; Standard RS485 and USB interface. 直流供电，带电流检测。具有负载电压监测、同相位切换、快速切换功能；标配RS485和USB接口。	AC/DC supply, has current detection. With load voltage monitoring, in-phase transfer, fast transfer function; standard RS485/USB ETHERNET interface. 交/直流供电，带电流检测。具有负载电压监测、同相位切换、快速切换功能；标配RS485/USB和ETHERNET接口。	AC/DC supply, has current detection. With load voltage monitoring, in-phase transfer, fast transfer function; standard RS485/USB ETHERNET interface. Have parallel switching function. 交/直流供电，带电流检测，具有负载电压监测、同相位切换、快速切换功能；标配RS485/USB和ETHERNET接口。有并联切换功能。
Display/显示	LCD(132*64)px				
Language 控制器语言	Chinese & English & Others/中文 & 英文 & 其他				
AC System 交流制式	1P2W/2P3W/3P3W/3P4W	1P2W/2P3W/3P4W	1P2W/2P3W/3P3W/3P4W	1P2W/2P3W/3P4W	
AC Voltage Range 交流电压范围	AC(50~360)V(L-N)	AC(50~305)V(L-N)	AC(50~360)V(L-N)	AC(50~305)V(L-N)	
AC Frequency 交流频率	50/60Hz				
Current and Power Display 电流及功率显示				●	
Over Current Warn 过流警告				●	
Volt. Freq. Protection 电压频率保护			●		
Monitor Interface 监控接口	RS485			RS485/ETHERNET	
Programming Interface 编程接口	RS485/USB			RS485/USB/ETHERNET	
Real-time Clock and Event Log 实时时钟及历史记录			●		
Scheduled Start Genset 定时试机			●		
Cycle Start Genset 循环开机			●		
Main Standby Transfer 主备用切换			●		
Synchronous Transfer 同步切换					●
Applicable ATS Type 适合开关类型	CC,CB and PC Switch/CC级、CB级和PC级开关				
Working Voltage 工作电压	DC(8~35)V	DC(8~35)V AC(90~305)V	DC(8~35)V	DC(8~35)V	AC(90~305)V
Programmable Input 可编程输入	4				
Programmable Output 可编程输出	6				
Case Dimensions 外形尺寸(mm)	198*154*54 (L*W*H)				
Panel Cutout 开孔尺寸(mm)	186*141				
Operating Temp. 工作温度	(-25~+70)°C				



HAT600P(PB/PI/PBI/PS)
Dual Power ATS Controller
双电源自动切换控制器



Model/型号	HAT600P	HAT600PI	HAT600PB	HAT600PBI	HAT600PS
Main Functions 主要功能	DC supply. With load voltage monitoring function; Standard RS485 and USB interface. 直流供电。具有负载电压监测功能； 标配RS485和USB接口。	DC supply, has current detection. With load voltage monitoring function; Standard RS485 and USB interface. 直流供电，带电流检测。具有负载电压监测功能； 标配RS485和USB接口。	AC/DC supply. With load voltage monitoring function; Standard RS485 and USB interface. 交/直流供电。具有负载电压监测功能； 标配RS485和USB接口。	AC/DC supply, has current detection. With load voltage monitoring function; standard RS485/USB ETHERNET interface. 交/直流供电,带电流检测。具有负载电压监测功能; 标配RS485/USB和ETHERNET接口。	AC/DC supply, has current detection. With load voltage monitoring function; standard RS485/USB ETHERNET interface. Have parallel switching function. 交/直流供电，带电流检测，具有负载电压监测功能； 标配RS485/USB和ETHERNET 接口。有并联切换功能。
Display/显示	LCD(132*64)px				
Language 控制器语言	Chinese & English & Others/中文 & 英文 & 其他				
AC System 交流制式	1P2W/2P3W/3P3W/3P4W		1P2W/2P3W/3P4W		
AC Voltage Range 交流电压范围	AC(50~360)V(L-N)		AC(50~305)V(L-N)		
AC Frequency 交流频率	50/60Hz				
Current and Power Display 电流及功率显示		●			●
Over Current Warn 过流警告		●			●
Volt Freq Protection 电压频率保护	●				
Monitor Interface 监控接口	RS485			RS485/ETHERNET	
Programming Interface 编程接口	RS485/USB			RS485/ETHERNET/USB	
Real-time Clock and Event Log 实时时钟及历史记录	●				
Scheduled Start Genset 定时试机	●				
Cycle Start Genset 循环开机	●				
Main Standby Transfer 主备用切换	●				
Synchronous Transfer 同步切换					●
Applicable ATS Type 适合开关类型	CC,CB and PC Switch/CC级、CB级和PC级开关				
Working Voltage 工作电压	DC(8~35)V		DC(8~35)V/AC(90~305)V		
Programmable Input 可编程输入	4				
Programmable Output 可编程输出	6				
Case Dimensions 外形尺寸(mm)	198*155*54 (L*W*H)				
Panel Cutout 开孔尺寸(mm)	186*141				
Operating Temp. 工作温度	(-25~+70)℃				



HAT660(B/BI/S)
Dual Power ATS Controller
双电源自动切换控制器

Model/型号	HAT660B	HAT660BI	HAT660S
Main Functions 主要功能	AC/DC supply. With load voltage monitoring function; Standard RS485 and USB interface. 交/直流供电，具有负载电压监测功能；标配RS485和USB接口。	AC/DC supply, has current detection. With load voltage monitoring function; standard RS485/ USB ETHERNET interface. 交/直流供电，带电流检测。具有负载电压监测功能；标配RS485/USB和ETHERNET接口。	AC/DC supply, has current detection. With load voltage monitoring function; With Synchronous Switching function; standard RS485/ USB ETHERNET interface. 交/直流供电，带电流检测。具有负载电压监测功能；有同步切换功能；标配RS485/USB和ETHERNET接口。
Display/显示	LCD(132*64)px		
Language 控制器语言	Chinese & English & Others/ 中文 & 英文 & 其他		
AC System 交流制式	1P2W/2P3W/3P4W		
AC Voltage Range 交流电压范围	AC(50~305)V(L-N)		
AC Frequency 交流频率	50/60Hz		
Current and Power Display 电流及功率显示		●	
Over Current Warn 过流警告		●	
Volt Freq Protection 电压频率保护		●	
Monitor Interface 监控接口	RS485	RS485/ETHERNET	
Programming Interface 编程接口	RS485/USB	RS485/USB/ETHERNET	
Real-time Clock and Event Log 实时时钟及历史记录		●	
Scheduled Start Genset 定时试机		●	
Cycle Start Genset 循环开机		●	
Synchronous Transfer 同步切换			●
Applicable ATS Type 适合开关类型	PC级、CB级、CC级		
Working Voltage 工作电压	DC(8~35)V/AC(90~305)V		
Programmable Input 可编程输入口	7		
Programmable Output 可编程输出口	7		
Case Dimensions 外形尺寸(mm)	198*154*54 (L*W*H)		
Panel Cutout 开孔尺寸(mm)	186*141		
Operating Temp. 工作温度	(-25~+70)°C		



HAT560(NC/NB/NBC)
Dual Power ATS Controller
双电源自动切换控制器

Model/型号	HAT560N	HAT560NC	HAT560NB	HAT560NBC
Main Functions 主要功能	With graphic LCD; monitors all AC system; suitable for PC, CB and CC switch. 图形液晶显示模块；各种交流制式采样；适用于控制PC级、CB级和CC级开关。			
Display/显示	LCD(132*64)px			
Language 控制器语言	Chinese & English/ 中文 & 英文			
AC System/交流制式	1P2W/2P3W/3P3W/3P4W		1P2W/2P3W/3P4W	
AC Voltage Range 交流电压范围	AC(30~360)V(L-N)		AC(170~277)V(L-N)	
AC Frequency 交流频率	50/60Hz			
Volt Freq Protection 电压频率保护	●			
Monitor Interface 监控接口	LINK	LINK/RS485	LINK	LINK/RS485
Programming Interface 编程接口	LINK	LINK/RS485	LINK	LINK/RS485
RTC(Real Time Clock) 实时时钟	●			
Scheduled Start Genset 定时试机	●			
Cycle Start Genset 循环开机	●			
Main Standby Transfer 主备用切换	●			
Applicable ATS Type 适合开关类型	CC,CB and PC Switch/CC级、CB级和PC级开关			
Working Voltage 工作电压	DC(8~35)V		DC(8~35)V/AC(170~277)V	
Programmable Input 可编程输入口	2			
Programmable Output 可编程输出口	4	3	4	3
Case Dimensions 外形尺寸(mm)	139*120*50 (L*W*H)			
Panel Cutout 开孔尺寸(mm)	130*111			
Operating Temp. 工作温度	(-25~+70)°C			



HAT552
Dual Power ATS Controller
双电源自动切换控制器

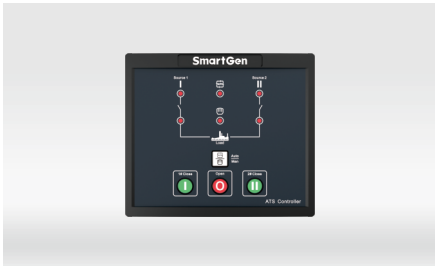


HAT553/553LT
Dual Power ATS Controller
双电源自动切换控制器



HATC60
Dual Power ATS Controller
双电源自动切换控制器

Model/型号	HAT552	HAT553	HAT553LT	HATC60
Main Functions 主要功能	Suitable for electromagnetic drive two-position ATS switch, one-to-one wiring, Chinese and English display, standard RS485 interface. 适用于电磁驱动型两段式ATS开关，接线一对一，中英文显示，标配RS485接口。	Suitable for electromagnetic drive three-position ATS switch, one-to-one wiring, Chinese and English display, standard RS485 interface. 适用于电磁驱动型三段式ATS开关，接线一对一，中英文显示，标配RS485接口。	Suitable for manual/auto control of PC class, CB class, CC class dual power transfer switches; with RS422, RS485, USB port; working temperature is: (-40~+70)°C 适用于PC、CB、CC级双电源转换开关的手/自动控制；具有RS422、RS485、USB接口；工作温度：（-40 ~+70)°C	With graphic LCD; monitors all AC system; suitable for SOCOMEC PC three-position switch. 图形液晶显示模块；各种交流制式采样；适用于控制SOCOMEC型PC三段式开关。
Display/显示	LCD(132*64)px			
Language 控制器语言	Chinese & English/ 中文 & 英文			
AC System/交流制式	1P2W/2P3W/3P4W			1P2W/2P3W/3P3W(Special order required/需特殊订货)/3P4W
AC Voltage Range 交流电压范围	AC(170~277)V(L-N)		AC(50-277)V(L-N)	AC(50~305)V(L-N)
AC Frequency 交流频率	50/60Hz			
Volt Freq Protection 电压频率保护	●			
Monitor Interface 监控接口	RS485		RS422	RS485
Programming Interface 编程接口	RS485/USB		RS422/USB	RS485
RTC(Real Time Clock) 实时时钟	●			
Scheduled Start Genset 定时试机	●			
Cycle Start Genset 循环开机				●
Main Standby Transfer 主备用切换	●			
Applicable ATS Type 适合开关类型	Two-position (Hankwang/Feiteng) 二段式(韩光/飞腾)	Three-position Feiteng 三段式飞腾型	Two/ Three-position PC/ CB/ CC 二段式/三段式 PC/CB/CC型	SOCOMEPC PC three-position SOCOMECC型PC三段式
Working Voltage 工作电压	AC(170~277)V		DC(9-35)V	DC(12~48)V/AC(90~305)V
Programmable Input 可编程输入	1			2
Programmable Output 可编程输出	2		1	4
Case Dimensions 外形尺寸(mm)	139*120*50(L*W*H)			163*133*51(L*W*H)
Panel Cutout 开孔尺寸(mm)	130*111			152*122
Operating Temp. 工作温度	(-25~+70)°C		(-40~+70)°C	



HAT530P/530PC
Dual Power ATS Controller
双电源自动切换控制器

Model/型号	HAT530P	HAT530PC
Main Functions 主要功能	The controller is applicable for two-position ATS and three-position ATS with controlling the start of genset. "Four remotes" (remote control, remote measurement, remote communication and remote adjustment) functions can be realized via RS485 communication port. 适用于控制二段式、三段式ATS开关并具有控制发电机组起动的功能。通过RS485口通讯，可实现遥控、遥测、通信、遥调“四通”功能。	
Display/显示	LED	
AC System/交流制式	1P2W/2P3W/3P4W	
AC Voltage Range 交流电压范围	AC(170~277)V(L-N)	
AC Frequency 交流频率	50/60Hz	
Volt Freq Protection 电压频率保护	●	
Monitor Interface 监控接口		RS485
Programming Interface 编程接口	USB	USB/RS485
Main Standby Transfer 主备用切换	●	
Applicable ATS Type 适合开关类型	PC Two-position(Hankwang/Feiteng)/ SOCOMEPC PC three-position PC二段式(韩光/飞腾)/SOCOMECC型PC三段式	
Working Voltage 工作电压	AC(170~277)V	
Case Dimensions 外形尺寸(mm)	139*120*50(L*W*H)	
Panel Cutout 开孔尺寸(mm)	130*111	
Operating Temp. 工作温度	(-25~+70)°C	



HAT360系列(Series)
Dual Power ATS Controller
双电源自动切换控制器



HAT320
Dual Power ATS Controller
双电源自动切换控制器



HAT310
Dual Power ATS Controller
双电源自动切换控制器

Model/型号	HAT363C	HAT363	HAT361C	HAT361
Main Functions 主要功能	It can precisely detect 2# voltages and make accurate judgement on the abnormal voltage. It is suitable for excitation system switch with two breakers, one breaker or none breaker. HAT363 is equipped with RS485. 可精确检测两路电压，对出现的电压异常做出准确判断，适用于励磁型开关，用于两个分断位、一个分断位和无分断位。HAT363C标配RS485。			
Display/显示	OLED			
Language 控制器语言	Chinese & English/ 中文 & 英文			
AC System/交流制式	1P2W/2P3W/3P4W			
AC Voltage Range 交流电压范围	AC(170~277)V(L-N)			
AC Frequency 交流频率	50/60Hz			
Volt. Freq. Protection 电压频率保护	●			
Monitor Interface 监控接口	RS485/LINK	LINK	RS485/LINK	LINK
Programming Interface 编程接口	RS485/LINK	LINK	RS485/LINK	LINK
Manual Test 手动试机	●			
Main Standby Transfer 主备用切换	●			
Programmable Input 可编程输入	1			
Programmable Output 可编程输出	1			
Working Voltage 工作电压	AC(170~277)V			
Case Dimensions 外形尺寸(mm)	143*124*49(L*W*H)			
Panel Cutout 开孔尺寸(mm)	132*113			
Operating Temp. 工作温度	(-25~+70)°C			

Model/型号	HAT320	HAT310
Main Functions 主要功能	The controller can sample voltage of 1-phase supply from genset, or 3-phase 3-wire supply from mains, which is suitable for PC-class ATS with two contact positions and CC-class ATS. 市电三相四线、发电单相电压采样，适用PC两段式、CC级开关	
Display/显示	LED	
AC System/交流制式	1P2W/3P4W	
AC Voltage Range 交流电压范围	AC(160~280)V(L-N)	
AC Frequency 交流频率	50/60Hz	
Applicable ATS Type 适合开关类型	PC Two-position/PC二段式	
Working Voltage 工作电压	AC(160~280)V	
Case Dimensions 外形尺寸(mm)	110*77.5*58(L*W*H)	
Panel Cutout 开孔尺寸(mm)	65*65.1	
Operating Temp. 工作温度	(-25~+70)°C	

ATSE CONTROLLER / 智能切换控制器

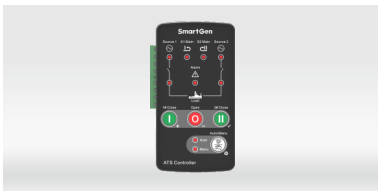
ATSE CONTROLLER / 智能切换控制器



HAT163
Dual Power ATS Controller
双电源自动切换控制器

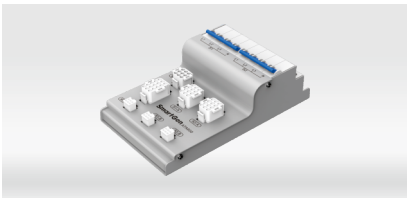


HAT162
Dual Power ATS Controller
双电源自动切换控制器

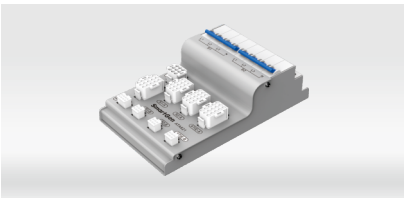


HAT160
Dual Power ATS Controller
双电源自动切换控制器

Model/型号	HAT163	HAT162	HAT160
Main Functions 主要功能	Monitors single phase, two phases, three phases, suitable for SOCOMEC PC three-position switch. 单相、两相、三相采样, 适用于SOCOMEC型PC三段式开关。		
Display/显示	LED		
AC System/交流制式	1P2W/2P3W/3P3W(Special order required/需特殊订货)/3P4W		1P2W/3P4W
AC Voltage Range 交流电压范围	AC(170~277)V(L-N)		
AC Frequency 交流频率	50/60Hz		
Monitor Interface 监控接口	LINK		
Programming Interface 编程接口	LINK		
Main Standby Transfer 主备用切换	●		
Applicable ATS Type 适合开关类型	SOCOMEC PC three-position SOCOMEC型PC三段式	Two-position/二段式	CB One Motor Operation CB级单电操
Working Voltage 工作电压	AC(170~277)V		
Case Dimensions 外形尺寸(mm)	86.9*158*119.5(L*W*H)		
Panel Cutout 开孔尺寸(mm)	73.5*144		
Operating Temp. 工作温度	(-25~+70)°C		



ATA600
Dual Power Switch Adapter
双电源开关适配器



ATA821
Bus Tie Dual Power Switch Adapter
母联型双电源开关适配器

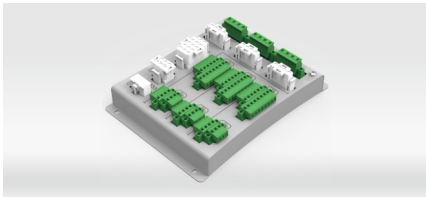


ATA821-MN
Bus Tie Dual Power Switch Adapter
母联型双电源开关适配器

Model/型号	ATA600	ATA821	ATA821-MN
Main Functions 主要功能	It can connect the controller and the ACB switch secondary line through adapter, one-to-one wiring is simple and fast, and realized the electrical interlock between the two switches. Suitable for HAT600N / P and HAT700 series. 通过适配器连接控制器和ACB开关二次线，一对一接线简单快捷，并实现了两开关之间的电气互锁。适用于HAT600N/P和HAT700系列。	It can connect the controller and the ACB switch secondary line through adapter, one-to-one wiring is simple and fast, and realized the electrical interlock between the three switches. Suitable for HAT821 bus tie controller. 通过适配器连接控制器和ACB开关二次线，一对一接线简单快捷。并实现了三台开关之间的电气互锁。适用于HAT821 母联控制器。	Bus-tie dual-power switch adapter, suitable for HAT821 to realize no-voltage release and electric interlock of closing coil functions. It has simple wirings and easy installation. 母联型双电源开关适配器,适配HAT821可实现失压脱扣和合闸线圈电气互锁功能，接线简单、方便快捷。
Rated Operating Voltage 额定工作电压	AC400V		
Maximum Operating Current 最大工作电流	10A		
Case Dimensions 外形尺寸(mm)	144.4*252*75.3(L*W*H)		144.4*262*75.3(L*W*H)
Panel Cutout 开孔尺寸(mm)	125*240		125*250
Operating Temp. 工作温度	(-25~+70)°C		



ATA821N
Bus Tie Adaptor
母联型双电源开关适配器



ATA833
Three Power Switch Adapter
三路电源开关适配器



TPS31
Three Power Switch Adapter
三路电源开关适配器

Model/型号	ATA821N	ATA833	TPS31
Main Functions 主要功能	ATA821N is an adapter for connecting HAT821 Dual Power Bus Tie Controller and intelligent circuit breaker, it saves a lot of field wiring work for users, saves work and time, and is safe and reliable. ATA821N是一款HAT821双电源母联自动切换控制器和智能断路器连接的分离式适配器, 可为用户节省大量的现场接线工作, 省工省时且可靠。	ATA833 is an adapter for connecting HAT833 three power ATS controller and intelligent circuit breaker, which is suitable for 3P4W AC system with 3-way power incomings; it saves a lot of field wiring work for users, saves work and time, and is safe and reliable. ATA833是一款适用于HAT833三路电源自动切换控制器和智能断路器连接的适配器, 适用于三路电源进线的三相四线的交流系统; 为用户节省了大量的现场接线工作, 省工省时且安全可靠。	TPS31 Three Power Supply Module is composed of microprocessor as the core with voltage monitoring function, providing three or two selective AC power output, which can be used for three power supplies or two power supplies. Its working mode can be set as mutual backup and supply as priority. TPS31三电源供电模块由微处理器为核心构成, 可用于三路电源输入, 也可用于两路电源输入, 具有过压、欠压监测功能, 用来提供三选一或二选一的交流电源输出。可设置为互为备用、按优先级供电两种工作模式。
AC Voltage Range 交流电压范围	AC(90~305)V		
Rated Operating Voltage 额定工作电压	AC400V		
AC Frequency 交流频率	50/60Hz	50/60Hz	
Maximum Operating Current 最大工作电流	10A	12A	
Case Dimensions 外形尺寸(mm)	265*100*89.5(L*W*H)	156.7*210*46(L*W*H)	115.5*102*72.5(L*W*H)
Operating Temp. 工作温度	(-25~+70)°C		

HMP300/HMP300-2
Power Integrated Protection Module
电量综合保护模块

HMP300 has LINK communication interface and CAN interface, HMP300-2 has RS485 communication interface.
HMP300具有LINK通讯接口和CAN接口, HMP300-2具有RS485通讯接口。



Case Dimensions
外观尺寸(mm): 107.6*89.7*60.7

DIN16A-2
Digital Input Module
开关量输入模块



Case Dimensions
外观尺寸(mm): 107.6*89.7*60.7

HVD300
Voltage Detection Relay
电压检测继电器



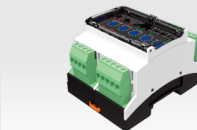
Case Dimensions
外观尺寸(mm): 89.7*71.6*60.7

HFT300
Frequency Test Relay
频率检测继电器



Case Dimensions
外观尺寸(mm): 89.7*71.6*60.7

HSM300
Synchronous Module
同步模块



Case Dimensions
外观尺寸(mm): 71.6*89.7*60.7

DOUT16B-2
Digital Output Module
开关量输出模块
An expansion module with 16 auxiliary digital output channels.
16路开关量输出模块



Case Dimensions
外观尺寸(mm): 161.6*89.7*60.7

HOC300
Over Current Protection Relay
过流保护继电器



Case Dimensions
外观尺寸(mm): 89.7*71.6*60.7

HPD300
Reverse Power Protection Relay
逆功率保护继电器



Case Dimensions
外观尺寸(mm): 89.7*71.6*60.7

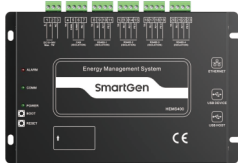
New Energy Products 新能源产品



BMS主控模块
BMS Master Control Module



BMS从控模块
BMS Slave Control Module



混合能源控制系统
Hybrid Energy Control System



EMS管理系统
EMS Management System



储能变流器控制器
PCS Controller



储能变流器
Power Conversion System



汇流柜
ESS Combiner Cabinet



液冷一体储能柜
CLiquid-cooled ESS Cabinet

Genset Controllers 发电机组控制器



单机自启动发电机组控制器
Self Starting Genset Controller



AMF发电机组控制器
AMF Genset Controller



4G一体式AMF发电机组控制器
4G Integrated AMF Genset Controller



增强型发电机组控制器
Enhanced Genset Controller



分体式发电机组并联控制器
Split Type Genset Parallel Controller



低温分体式发电机组控制器
Low-temperature Split Genset Controller



冗余并联发电机组控制器
Redundant Parallel Genset Controller



发电机组远程监控控制器
Remote Monitoring Controller

Marine Engine Controllers 船用机旁控制器



游艇发动机控制器
Yacht Engine Controller



小型船用发动机控制器
Small Marine Engine Controller



船用柴油发动机控制器
Marine Diesel Engine Controller



增强型船用发动机控制器
Enhanced Marine Diesel Engine Controller



船用发动机远程监控控制器
Remote Monitoring Controller



功率管理控制器
Power Management Controller



分体式功率管理控制器
Split Type Power Management Controller



发动机监控仪
Engine Monitoring Controller

Construction Machinery Controllers 工程机械控制器



工程机械控制器
Construction Machinery Engine Controller



发动机CAN监控模块
Engine CAN Monitoring Module



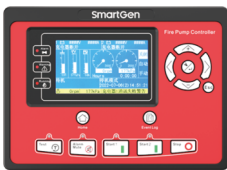
发动机控制器
Engine Controller



柴驱泵组控制器
Diesel Drive Pump Unit Controller



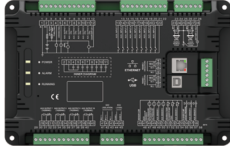
柴驱空压机控制器
Diesel Air Compressor Controller



消防水泵机组控制器
Diesel Engine Fire Pump Controller



压裂车控制器(显示模块)
Fracturing Truck Controller (Display Module)



压裂车控制器(主控模块)
Fracturing Truck Controller (Master Control Module)

Chargers/Heaters 充电器/加热器



数显型蓄电池充电器
Digital Display Battery Charger



智能型蓄电池充电器
Smart Battery Charger



蓄电池充电器
Battery Charger



蓄电池充电箱
Battery Charger Box



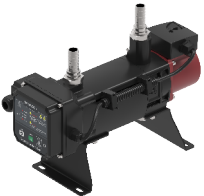
燃油加热器
Hydronic Fuel Water Heater



强制循环水加热器
Forced Circulation Heater



强制循环水加热器
Forced Circulation Heater

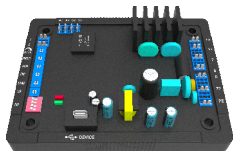


强制循环水加热器
Forced Circulation Heater

Others 其他



数字电压调节器
Digital Voltage Regulator



数字电压调节器
Digital Voltage Regulator



数字电压调节器
Digital Voltage Regulator



双电源自动转换开关
Dual Power Automatic Transfer Switch



4G云监控通信模块
4G Cloud Monitoring Communication Module



电量综合保护模块
Power Integrated Protection Module