



Create better life with green energy



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Manual


Residential / Commercial & Industrial PV-Storage System





Product Features


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Rack-mounted design for easy installation and flexible expansion
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Full-Dimension Remote Intelligent Control
- 

Fast Charging, Ultra-Long Endurance
- 

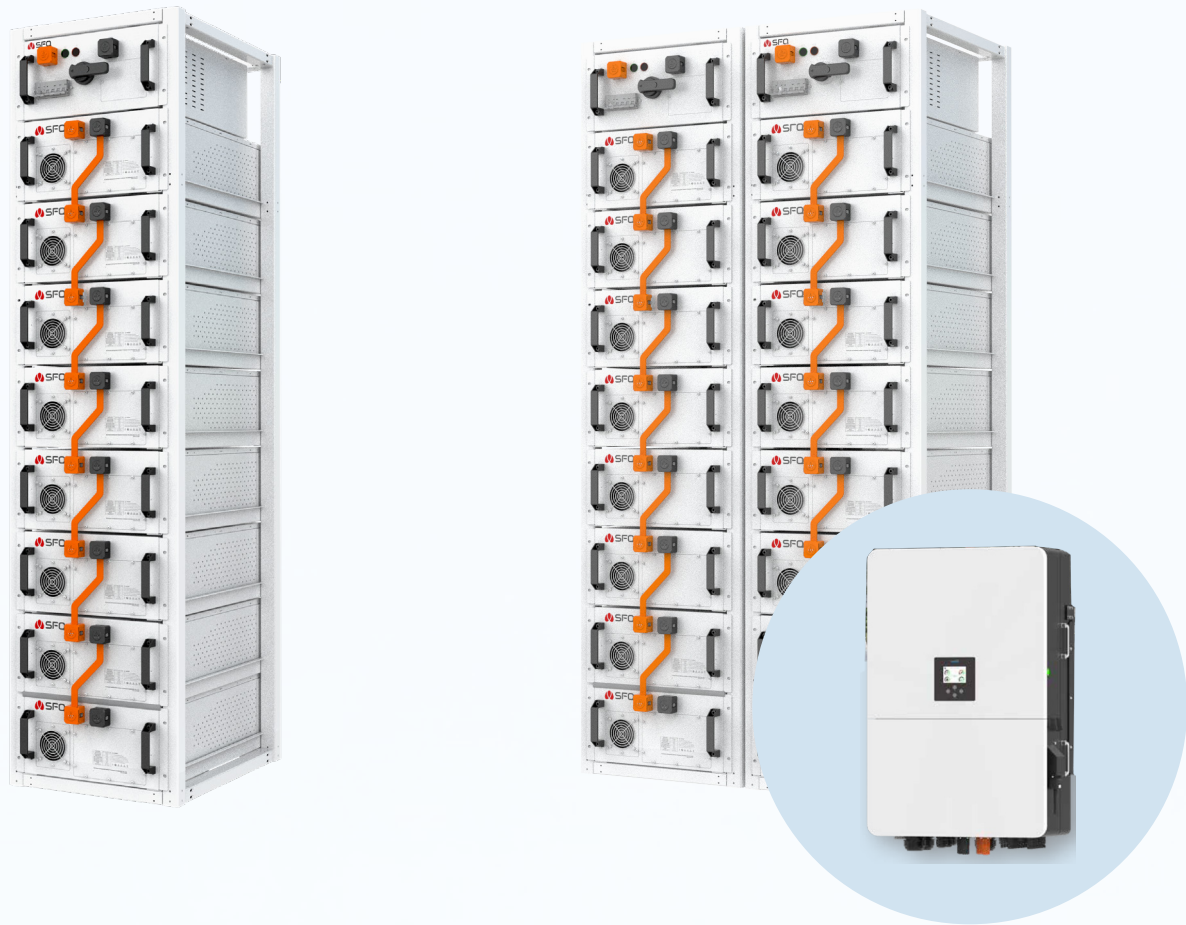
Intelligent Temperature Control, Multiple Safety Protections
- 

Concise appearance design for clear visibility of equipment status
- 

Compatible with Multiple Operating Modes and Flexible Capacity Configuration


Item	Product Parameters			
System Parameters				
Model	ICESS-T 0-30/40/A	ICESS-T 0-40/80/A	ICESS-T 0-50/102/A	ICESS-T 0-60/122/A
Capacity	40.96kWh	81.92kWh	102.4kWh	122.88kWh
Rated Voltage	409.6V		512V	614V
Operating Voltage Range	371.2V~454.4V		464V~568V	556.8V~681.6V
Battery Cell	LFP3.2V/100Ah			
Communication Method	LAN、RS485/CAN、 4G			
Operating Temperature Range	Charging: 0°C~55°C Discharging: -20°C~55°C			
Maximum Charge/Discharge Current	100A			
IP Rating	IP54			
Relative Humidity	10%RH~90%RH			
Altitude	≤2000m			
Installation Method	Rack-mounted			
Dimensions (mm)	600*520*1300	1200*520*1300	1800*520*1300	1800*520*1550
Inverter Parameters				
Battery Voltage Range	160 ~800V	160 ~800V	160 ~800V	160 ~1000V
Maximum Charging Current	2 ×50A		2 ×80A	
Maximum Discharging Current	2 ×50A		2 ×80A	
Maximum Charge/Discharge Power	33kW	44kW	55kW	66kW
Number of Battery Input Channels	2			
Battery Charging Strategy	Adaptive BMS			
PV Maximum DC Input Power	39kW	52kW	65kW	96kW
PV Maximum DC Input Voltage	1000V			
MPPT (Maximum Power Point Tracking) Range	150 ~850V			
Full Load DC Voltage Range	360 ~850V	360 ~850V	450 ~850V	365~850V
Rated DC Input Voltage	600V	600V	600V	650V
PV Input Current	3 ×36A	4 ×36A	4 ×36A	6 ×36A
Number of MPPTs	3	4	4	6


Residential / Commercial & Industrial PV-Storage System





Item	Product Parameters			
System Parameters				
Model	ICESS-T 0-60/112/A	ICESS-T 0-100/225/A	ICESS-T 0-160/321/A	ICESS-T 0-160/482/A
Capacity	112.532kWh	225.075kWh	321.536kWh	482.304kWh
Rated Voltage	358.4V		512V	
Operating Voltage Range	324.8V~397.6V		464V~568V	
Battery Cell	LFP3.2V/314Ah			
Communication Method	LAN、RS485/CAN、 4G			
Operating Temperature Range	Charging: 0°C ~ 55°C Discharging: -20°C ~ 55°C			
Maximum Charge/Discharge Current	157A		314A	
IP Rating	IP54			
Relative Humidity	10%RH~90%RH			
Altitude	≤2000m			
Installation Method	Rack-mounted			
Dimensions (mm)	1900*500*800	1900*1000*800	1900*1500*800	1900*2000*800
Inverter Parameters				
Battery Voltage Range	160 ~1000V			
Maximum Charging Current	1 ×157A		2 ×157A	
Maximum Discharging Current	1 ×157A		2 ×157A	
Maximum Charge/Discharge Power	66kW	110kW	176kW	
Number of Battery Input Channels	1	2	2	
Battery Charging Strategy	Adaptive BMS			
PV Maximum DC Input Power	40-180kW			
PV Maximum DC Input Voltage	1000V			
MPPT (Maximum Power Point Tracking) Range	150 ~850V			
Full Load DC Voltage Range	365~850V		485 ~850V	
Rated DC Input Voltage	650V		650V	
PV Input Current	4 ×36A		6 ×36A	
Number of MPPTs	4		6	


Product Features


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Rack-mounted design for easy installation and flexible expansion
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Full-Dimension Remote Intelligent Control
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Fast Charging, Ultra-Long Endurance
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Intelligent Temperature Control, Multiple Safety Protections
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Concise appearance design for clear visibility of equipment status
- 

Compatible with Multiple Operating Modes and Flexible Capacity Configuration

Commercial & Industrial Energy Storage System



Product Features

- Safe and reliable
 - Full-range battery cell temperature collection + AI monitoring and early warning
 - Intelligent temperature control system, temperature/smoke detection + PACK-level and cluster-level composite fire protection
 - Two-stage overcurrent protection, suitable for harsh and complex environments
- Flexible and stable
 - Intelligent AI technology and smart energy management system (EMS) to improve equipment operating efficiency
 - QR code-based fault query + data monitoring for clear display of equipment status data
 - Professional operation and maintenance as well as monitoring software support to ensure safe, stable and reliable operation of equipment
- Intelligent operation and maintenance
 - Flexible customization of operation strategies, better matching load characteristics and power consumption habits
 - High-efficiency and flexible PCS configuration + 314Ah battery cell large-capacity system
 - PV-storage intelligent integrated system with multiple options and on-demand expansion

Product Parameters				
Equipment Model	ICESS-T 0-30/160/A	ICESS-T 0-100/225/A	ICESS-T 0-120/241/A	ICESS-T 0-125/257/A
AC Side Parameters (Grid-connected)				
Apparent Power	30kVA	110kVA	135kVA	137.5kVA
Rated Power	30kW	100kW	120kW	125kW
Rated Voltage	400Vac			
Voltage Range	400Vac±15%			
Rated Current	44A	144A	173A	180A
Frequency Range	50/60Hz±5Hz			
Power Factor	0.99			
THDi	≤3%			
AC System	Three-Phase Five-Wire System			
AC Side Parameters (Off-grid)				
Rated Power	30kW	100kW	120kW	125kW
Rated Voltage	380Vac			
Rated Current	44A	152A	173A	190A
Rated Frequency	50/60Hz			
THDu	≤5%			
Overload Capacity	110% (10min) , 120% (1min)			
Battery Side Parameters				
Battery Capacity	160.768KWh	225.075KWh	241.152KWh	257.228KWh
Battery Type	LFP			
Rated Voltage	512V	716.8V	768V	819.2V
Voltage Range	464~568V	649.6V~795.2V	696~852V	742.4V~908.8V
Basic Characteristics				
AC/DC Startup Function	Equipped with			
Islanding Protection	Equipped with			
Forward/Reverse Switching Time	≤10ms			
System Efficiency	≥89%			
Protection Functions	Overvoltage/Undervoltage, Overcurrent, Overtemperature/Low Temperature, Islanding, Overhigh/Overlow SOC, Low Insulation Resistance, Short Circuit Protection, etc.			
Operating Temperature	-20°C~+50°C			
Cooling Method	Air Cooling + Intelligent Air Conditioning			
Relative Humidity	≤95%RH, No Condensation			
Altitude	3000m			
IP Protection Rating	IP54			
Noise	≤70dB			
Communication Method	LAN、RS485、4G			
Overall Dimensions (mm)	1820*1254*2330 (Including Air Conditioning)			

Commercial & Industrial Energy Storage System



Product Features

- Safe and reliable
 - Independent liquid cooling system + compartment isolation, featuring high protection and safety performance
 - Full-range battery cell temperature collection, intelligent temperature control system + AI monitoring and early warning
 - Two-stage overcurrent protection, temperature/smoke detection + PACK-level and cluster-level composite fire protection
- Flexible and stable
 - Intelligent AI technology and smart Energy Management System (EMS) to improve equipment operating efficiency
 - QR code-based fault query + data monitoring for clear display of equipment status data
 - Professional operation and maintenance and monitoring software support to ensure safe, stable and reliable operation of the equipment
- Intelligent operation and maintenance
 - Flexible customization of operation strategies, better matching load characteristics and power consumption habits
 - Centralized control and management of multi-unit parallel connection, with hot-swapping and hot-disconnection technology to reduce fault impacts
 - PV-storage intelligent integrated system with multiple options and flexible expansion

Product Parameters		
Equipment Model	ICESS-T 0-105/208/L	ICESS-T 0-130/261/L
AC Side Parameters (Grid Connection)		
Apparent Power	115.5kVA	143kVA
Rated Power	105kW	130kW
Rated Voltage	400Vac	
Voltage Range	400Vac±15%	
Maximum Current	151.5A	188A
Frequency Range	50/60Hz±5Hz	
Power Factor	0.99	
THDi	≤3%	
AC System	Three-Phase Five-Wire System	
AC Side Parameters (Off-Grid)		
Rated Power	105kW	130kW
Rated Voltage	380Vac	
Rated Current	151.5A	188A
Rated Frequency	50/60Hz	
THDu	≤5%	
Overload Capacity	110% (10min) , 120% (1min)	
Battery Side Parameters		
Battery Capacity	208.998KWh	261.248KWh
Battery Type	LFP	
Rated Voltage	665.6V	832V
Voltage Range	603.2V~738.4V	754V~923V
Basic Characteristics		
AC/DC Startup Function	Equipped with	
Islanding Protection	Equipped with	
Forward/Reverse Switching Time	≤10ms	
System Efficiency	≥89%	
Protection Functions	Overvoltage/Undervoltage, Overcurrent, Overtemperature/Low Temperature, Islanding, Overhigh/Overflow SOC, Low Insulation Resistance, Short Circuit Protection, etc.	
Operating Temperature	-25℃~+55℃	
Cooling Method	Liquid Cooling	
Relative Humidity	≤95%RH, No Condensation	
Altitude	3000m	
IP Rating	IP54	
Noise Level	≤70dB	
Communication Method	LAN、RS485、4G	
Overall Dimensions (mm)	1000*1350*2350	

Distributed Microgrid System



Product Features

- Split modular design for more flexible deployment and expansion
 - Adopts a highly protective split structure of "one unit per cabin / one cabinet per cabin"
 - Independent temperature control and independent operation & maintenance; capacity ranges from 241 to 723 kWh
 - PACK-level and cluster-level composite fire protection
- Intelligent Operation and Maintenance
 - Equipped with intelligent BMS + AI energy management system to improve equipment operating efficiency
 - Supports LAN/RS485/CAN remote monitoring
 - Enables multi-module linkage and centralized dispatching of "source-storage-load"
- Full-Dimensional Safety Protection
 - Equipped with full-range battery cell status collection + AI predictive early warning
 - Smoke/temperature detection + perfluorohexane/aerosol fire protection (optional)
 - Customizable on demand, flexible matching of battery systems and flexible power selection

Battery Cabinet Product Parameters			
Equipment Model	TCESS-S 60-120/241/A	TCESS-S 120-120/482/A	TCESS-S 180-120/723/A
AC Side Parameters (Grid-Connected)			
Apparent Power	132kVA		
Rated Power	120kW		
Rated Voltage	400Vac		
Voltage Range	400Vac±15%		
Rated Current	180A		
Frequency Range	50/60Hz		
Power Factor (PF)	0.99		
THDi	≤3%		
AC System	Three-Phase Five-Wire System		
AC Side Parameters (Off-Grid)			
Rated Power	120kW		
Rated Voltage	380Vac		
Rated Current	190A		
Rated Frequency	50/60Hz		
THDu	≤5%		
Overload Capacity	110%（10min）, 120%（1min）		
DC Side Parameters (Battery, PV)			
PV Open-Circuit Voltage (Voc)	700V		
PV Voltage Range	300V~670V		
Rated PV Power	240~300kW	200~500kW	
Maximum Supported PV Power	1.1~1.4 times		
Number of PV MPPTs	16 Channels		
Rated Battery Capacity	241.152kWh	482.304kWh	723.456kWh
Battery Voltage Range	696~852V		
BMS Three-Level Display & Control	be equipped with		
Maximum Charging Current	190A		
Maximum Discharging Current	190A		
Maximum Number of Battery Clusters	1 Battery Cluster	2 Battery Cluster	3 Battery Cluster
Basic Characteristics			
Diesel Generator Interface	be equipped with		
Grid-Connected/Off-Grid Switching	be equipped with		
Seamless Switching	≤10ms		
Cooling Method	Forced Air Cooling		
Communication Interface	LAN/CAN/RS485		
IP Protection Class / IP Rating	IP54		

Distributed Microgrid System

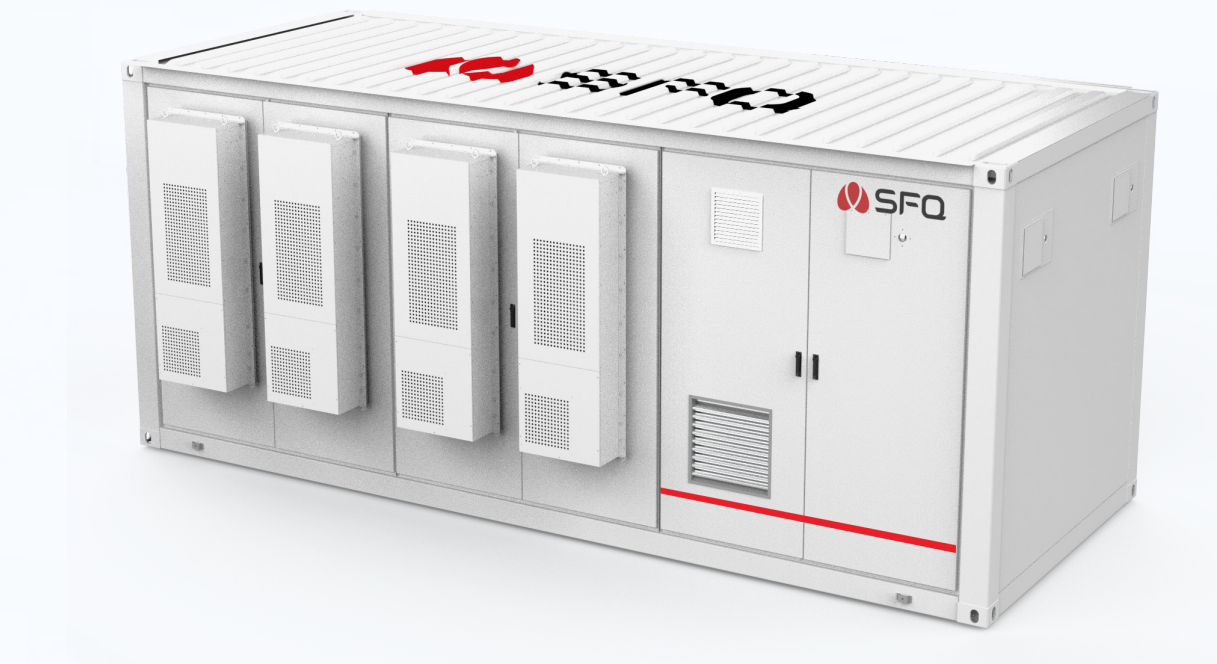


Product Features

- Split modular design for more flexible deployment and expansion
 - Adopts a split modular structure that allows combined deployment on demand
 - One temperature control system per cluster, one fire protection system per cluster, full-range battery cell temperature collection + AI monitoring and early warning
 - Suitable for different microgrid scenarios such as remote areas and industrial & commercial distributed energy systems
- Full-Dimensional Protection + Wide-Range Environmental Compatibility
 - IP54 high protection rating, supporting a wide temperature range of -30°C ~ +55°C
 - Equipped with multiple protections including over-voltage, under-voltage, over-current and over-temperature
 - Supported by professional operation and maintenance as well as monitoring software to ensure safe, stable and reliable operation of the equipment
- Dedicated Collaboration for Microgrids
 - Supports AC/DC startup, with grid-connected/off-grid switchover time ≤ 10ms
 - THDi as low as 0.99%, delivering high-quality and stable output power
 - Features 110% (10min) and 120% (1min) overload capacity

Battery Cabinet Product Parameters			
Equipment Model	TCESS-S 60-130/261/L	TCESS-S 120-130/261/L	TCESS-S 180-130/783/L
AC Side Parameters (Grid-Connected)			
Apparent Power	143kVA		
Rated Power	130kW		
Rated Voltage	400Vac		
Voltage Range	400Vac±15%		
Rated Current	188A		
Frequency Range	50/60Hz±5Hz		
Power Factor (PF)	0.99		
THDi	≤3%		
AC System	Three-Phase Five-Wire System		
AC Side Parameters (Off-Grid)			
Rated Power	130kW		
Rated Voltage	380Vac		
Rated Current	197A		
Rated Frequency	50/60Hz		
THDu	≤5%		
Overload Capacity	110%（10min）, 120%（1min）		
DC Side Parameters (Battery, PV)			
PV Open-Circuit Voltage (Voc)	700V		
PV Voltage Range	300V~670V		
Rated PV Power	240~300kW	200~500kW	
Maximum Supported PV Power	1.1~1.4 times		
Number of PV MPPTs	16 Channels		
Rated Battery Capacity	261.245kWh	522.496kWh	783.744kWh
Battery Voltage Range	754V ~923V		
BMS Three-Level Display & Control	be equipped with		
Maximum Charging Current	188A		
Maximum Discharging Current	188A		
Maximum Number of Battery Clusters	1 Battery Cluster	2 Battery Cluster	3 Battery Cluster
Basic Characteristics			
Diesel Generator Interface	be equipped with		
Grid-connected / Off-grid Switching	be equipped with		
Seamless Switching	≤10ms		
Cooling Method	Forced Liquid Cooling		
Communication Interface	LAN/CAN/RS485		
IP Rating	IP54		

Containerized Microgrid System



Product Features

- High-efficiency air cooling + wide-range environmental compatibility
 - Adopts forced air cooling solution, supporting wide-temperature operation from -25°C to +55°C
 - Equipped with IP54 protection rating, suitable for complex outdoor scenarios
 - Power coverage ranges from 250kW to 720kW, compatible with photovoltaic input of 300V to 670V
- Intelligent EMS + Grid Collaborative Operation and Maintenance
 - Equipped with an AI Energy Management System (EMS) to enhance equipment operating efficiency
 - Compatible with multiple communication interfaces including LAN/CAN/RS485, enabling remote monitoring of operating status
 - Supports customized multi-energy integration of "wind/solar/diesel (gas)-storage-grid"
- Full-link high-security protection
 - Standard container + independent compartment structure, equipped with a full range of battery cells
 - Temperature collection + AI predictive early warning
 - Intelligent integration of wind, solar, diesel (gas), storage and grid, with multiple options and flexible expansion

Product Parameters			
Device Model	SCESS-T 250-250/1028/A	SCESS-T 400-400/1446/A	SCESS-T 720-720/1446/A
AC-side Parameters (Grid-connected)			
Apparent Power	275kVA	440kVA	810kVA
Rated Power	250kW	400kW	720kW
Rated Current	360A	577.3A	1039.26A
Rated Voltage	400Vac		
Voltage Range	400Vac±15%		
Frequency Range	50/60Hz		
Power Factor	0.99		
THDi	≤3%		
AC System	Three-phase Five-wire System		
AC-side Parameters (Off-grid)			
Rated Power	250kW	400kW	720kW
Rated Current	380A	608A	1094A
Rated Voltage	380Vac		
Rated Frequency	50/60Hz		
THDu	≤5%		
Overload Capacity	110% (10min) , 120% (1min)		
DC-side Parameters (PV, Battery)			
Number of PV MPPTs	16 Channels	28 Channels	48 Channels
Rated PV Power	240~300kW	200~500kW	
Maximum Supported PV Power	1.1 to 1.4 times		
PV Open-circuit Voltage	700V		
PV Voltage Range	300V~670V		
Rated Battery Capacity	1028.915kWh	1446.912kWh	
Battery Voltage Range	742.2V~908.8V	696V~852V	
Maximum Charging Current	337A	575A	1034A
Maximum Discharging Current	337A	575A	
Maximum Number of Battery Clusters	4 Clusters	6 Clusters	
Three-level Monitoring and Control of BMS	Be Equipped with		
Basic Characteristics			
Diesel Generator Interface	Be Equipped with	Be Equipped with	/
Seamless Switching	≤10ms	≤10ms	/
Grid-connected/Off-grid Switching	Be Equipped with		
Cooling Method	Forced Air Cooling		
Communication Interface	LAN/CAN/RS485		
IP Rating	IP54		
Operating Ambient Temperature Range	-25℃~ +55℃		
Relative Humidity	≤95% RH, Non-condensing		
Altitude	3000m		
Noise Level	≤70dB		
HMI	Touch Screen		
Dimensions (mm)	6058*2438*2896		

Containerized Microgrid System

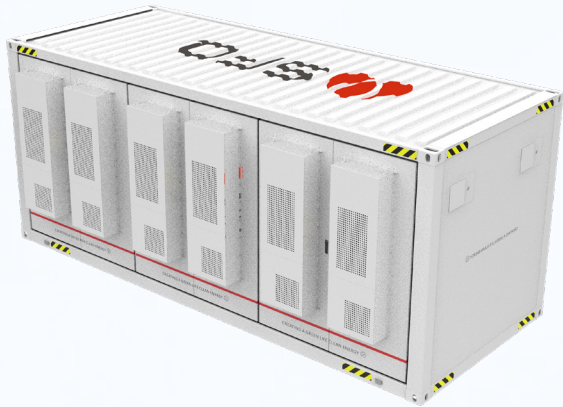


Product Features

- Precision liquid cooling for heat dissipation, suitable for large-capacity and high-load scenarios
 - Adopts liquid cooling solution with superior temperature control precision
 - Can stably support the operation of ultra-high power loads ranging from 250kW to 780kW
 - Comes standard with full-range battery cell temperature collection + AI predictive early warning to identify potential risks in advance
- Intelligent EMS + High-efficiency Grid Collaboration
 - Equipped with an AI Energy Management System (EMS) to improve equipment operating efficiency
 - Compatible with multiple communication interfaces including LAN/CAN/RS485, enabling real-time remote monitoring of operating status
 - Professional operation and maintenance/monitoring software provides support to ensure the equipment is safe, stable and reliable
- Wide-range adaptation + Multi-energy integration
 - Photovoltaic input voltage ranges from 200V to 1100V (supports 1-20 channels of MPPT)
 - Large-capacity battery system + high-power energy supply, suitable for various scenarios
 - Supports customized multi-energy integration of "wind/solar/diesel (gas)-storage-grid"

Product Parameters			
Device Model	SCESS-T 250-250/1044/L	SCESS-T 400-400/1567/L	SCESS-T 780-780/1567/L
AC-side Parameters (Grid-connected)			
Apparent Power	275kVA	440kVA	810kVA
Rated Power	250kW	400kW	780kW
Rated Current	360A	577A	1125A
Rated Voltage	400Vac		
Voltage Range	400Vac±15%		
Frequency Range	50/60Hz		
Power Factor	0.99		
THDi	≤3%		
AC System	Three-phase Five-wire System		
AC-side Parameters (Off-grid)			
Rated Power	250kW	400kW	780kW
Rated Current	380A	530A	1034A
Rated Voltage	380Vac		
Rated Frequency	50/60Hz		
THDu	≤5%		
Overload Capacity	110% (10min) , 120% (1min)		
DC-side Parameters (PV, Battery)			
Number of PV MPPTs	16 Channels	32 Channels	48 Channels
Rated PV Power	240~300kW	200~500kW	200~800kW
Maximum Supported PV Power	1.1 to 1.4 times		
PV Open-circuit Voltage	700V	700V	1100V
PV Voltage Range	300V~670V	300V~670V	200V~1000V
Rated Battery Capacity	1044.992kWh	1567.488kWh	
Battery Voltage Range	754V~923V	603.2V~738.4V	
Maximum Charging Current	415A	690A	
Maximum Discharging Current	415A	690A	
Maximum Number of Battery Clusters	5 Clusters	6 Clusters	
Three-level Monitoring and Control of BMS	Be Equipped with		
Basic Characteristics			
Diesel Generator Interface	Be Equipped with	Be Equipped with	/
Seamless Switching	≤10ms	Be Equipped with	/
Grid-connected/Off-grid Switching	Be Equipped with		
Cooling Method	Liquid Cooling		
Communication Interface	LAN/CAN/RS485		
IP Rating	IP54		
Operating Ambient Temperature Range	-25℃~ +55℃		
Relative Humidity	≤95% RH, Non-condensing		
Altitude	3000m		
Noise Level	≤70dB		
HMI	Touch Screen		
Dimensions (mm)	6058*2438*2896		

Containerized Energy Storage System

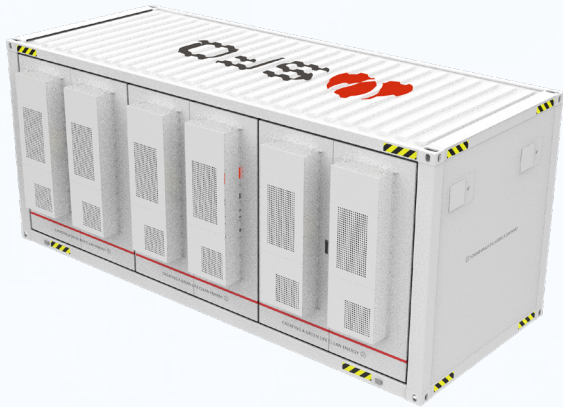


Product Features

- High-efficiency temperature control + High-level protection
 - Adopts independent liquid cooling/air cooling dual cooling solutions (optional selection as required)
 - Equipped with compartment physical isolation, suitable for stable heat dissipation of large-capacity energy storage
 - Temperature/smoke detection + PACK-level and cluster-level composite fire protection
- Full-dimensional intelligent monitoring + Remote operation and maintenance
 - Full-range battery cell temperature collection combined with AI predictive monitoring enables early warning of abnormalities
 - Compatible with multiple communication interfaces including LAN/CAN/RS485, allowing remote monitoring of operating status
 - Supports customized multi-energy integration of "wind/solar/diesel (gas)-storage-grid"
- Ultra-large capacity + Flexible adaptation
 - Capacity covers an ultra-wide range from 2170kWh to 5015kWh
 - Supports customized busbar output, compatible with various PCS access and configuration schemes
 - Intelligent integration of wind, solar, diesel (gas), storage and grid, with multiple options and flexible expansion

Battery Container Product Parameters		
Equipment Model	ICS-DC 2170/A/10	ICS-DC 2351/L/10
Cell Parameters		
Cell Specifications	3.2V/314Ah	
Battery Type	LFP	
Battery Module Parameters		
Packaging Configuration	1P16S	1P52S
Nominal Voltage	51.2V	166.4V
Nominal Capacity	16.076kWh	52.249kWh
Nominal Charge/Discharge Current	157A	
Nominal Charge/Discharge Rate	0.5C	
Cooling Method	Air Cooling	Liquid Cooling
Battery System Parameters		
Maximum Number of Battery Clusters	9	9
Nominal Voltage	768V	832V
Nominal Capacity	2170.368kWh	2351.232kWh
Voltage Range	696~852V	754V~923V
Nominal Charge/Discharge Current	1256A	1413A
Nominal Charge/Discharge Rate	0.5C	
Cooling Method	Air Cooling	Liquid Cooling
Fire Protection	Perfluorohexanone / Heptafluoropropane / Aerosol (Optional)	
Smoke Detection & Temperature Detection	Per Cluster: 1 Smoke Detector, 1 Temperature Detector	
Basic Parameters		
Communication Interface	LAN/RS485/CAN	
IP Rating	IP54	
Operating Ambient Temperature Range	-25°C~+55°C	
Storage Temperature Range	-20~45°C (1 month) / 0~35°C (3 months)	
Relative Humidity	≤95% RH, Non-condensing	
Altitude	3000m	
Noise Level	≤70dB	
Dimensions (mm)	6058*2438*2896	

Containerized Energy Storage System



Product Features

- High-efficiency temperature control + High-level protection
 - Adopts independent liquid cooling/air cooling dual cooling solutions (optional selection as required)
 - Equipped with compartment physical isolation, suitable for stable heat dissipation of large-capacity energy storage
 - Temperature/smoke detection + PACK-level and cluster-level composite fire protection
- Full-dimensional intelligent monitoring + Remote operation and maintenance
 - Full-range battery cell temperature collection combined with AI predictive monitoring enables early warning of abnormalities
 - Compatible with multiple communication interfaces including LAN/CAN/RS485, allowing remote monitoring of operating status
 - Supports customized multi-energy integration of "wind/solar/diesel (gas)-storage-grid"
- Ultra-large capacity + Flexible adaptation
 - Capacity covers an ultra-wide range from 2170kWh to 5015kWh
 - Supports customized busbar output, compatible with various PCS access and configuration schemes
 - Intelligent integration of wind, solar, diesel (gas), storage and grid, with multiple options and flexible expansion

Battery Container Product Parameters		
Equipment Model	ICS-DC 2507/L/15	ICS-DC 5015/L/15
Cell Parameters		
Cell Specifications	3.2V/314Ah	
Battery Type	LFP	
Battery Module Parameters		
Packaging Configuration	1P52S	
Nominal Voltage	166.4V	
Nominal Capacity	52.249kWh	
Nominal Charge/Discharge Current	157A	
Nominal Charge/Discharge Rate	0.5C	
Cooling Method	Liquid Cooling	
Battery System Parameters		
Maximum Number of Battery Clusters	6	12
Nominal Voltage	1331.2V	1331.2V
Nominal Capacity	2507.980kWh	5015.961kWh
Voltage Range	1206.4V~1476.8V	1206.4~1476.8V
Nominal Charge/Discharge Current	942A	1884A
Nominal Charge/Discharge Rate	0.5C	
Cooling Method	Liquid Cooling	
Fire Protection	Perfluorohexanone / Heptafluoropropane / Aerosol (Optional)	
Smoke Detection & Temperature Detection	Per Cluster: 1 Smoke Detector, 1 Temperature Detector	
Basic Parameters		
Communication Interface	LAN/RS485/CAN	
IP Rating	IP54	
Operating Ambient Temperature Range	-25°C~+55°C	
Storage Temperature Range	-20~45°C (1 month) / 0~35°C (3 months)	
Relative Humidity	≤95% RH, Non-condensing	
Altitude	3000m	
Noise Level	≤70dB	
Dimensions (mm)	6058*2438*2896	

Multi-Energy Integrated Intelligent Microgrid System



Product Features

- Safe and reliable
 - Standard container design with high protection rating, adaptable to various harsh environments
 - Multi-level energy protection, fault monitoring and early warning
 - Intelligent AI technology with multiple safeguard linkage to ensure system safety and reliability
- Intelligent operation and maintenance
 - Intelligent AI technology and an intelligent Energy Management System (EMS) to improve equipment operating efficiency
 - Intelligent microgrid management technology and a random fault exit strategy to ensure stable system operation
 - Professional operation and maintenance/monitoring software provides support to guarantee the equipment is safe, stable and reliable
- Flexible and stable
 - Intelligent integration system of wind, solar, diesel (gas), storage and grid, with optional selection and on-demand expansion
 - Combined with local resources, it maximizes the access to multiple energy sources and improves energy collection capacity
 - Multi-energy module combination and centralized power management enable the realization of one-source-one-management

Power Container Product Parameters		
Equipment Model	ICS-AC XX-400/54	ICS-AC XX-1000/54
AC Side Parameters (Grid-Connected)		
Apparent Power	440kVA	1100kVA
Rated Power	400kW	1000kW
Rated Voltage	400Vac	
Voltage Range	400Vac±15%	
Rated Current	582A	1443A
Frequency Range	50/60Hz±5Hz	
Power Factor (PF)	0.99	
THDi	≤3%	
AC System	Three-phase five-wire system	
AC Side Parameters (Off-Grid)		
Rated Power	400kW	1000kW
Rated Voltage	380Vac±15%	
Rated Current	1519A	
Rated Current	50/60Hz±5Hz	
THDU	≤5%	
Overload Capacity	110% (10min) , 120% (1min)	
DC Side Parameters (Battery, PV)		
PV Open-Circuit Voltage	700V	
PV Voltage Range	300V~670V	
Rated PV Power	100~1000kW	
Maximum Supported PV Power	1.1~1.4 Times	
Number of PV MPPT Trackers	8~80 Channels	
Battery Voltage Range	300V~1000V	
BMS Three-Level Display & Control	Be Equipped With	
Maximum Charging Current	1470A	
Maximum Discharging Current	1470A	
Basic Parameters		
Cooling Method	Forced Air Cooling	
Communication Interface	LAN/RS485	
IP Rating	IP54	
Operating Ambient Temperature Range	-25°C~~+55°C	
Relative Humidity (RH)	≤95% RH, No Condensation	
Altitude	3000m	
Noise Level	≤70dB	
Human-Machine Interface (HMI)	Touch Screen	
Overall Dimensions (mm)	3029*2438*2896	

2.5MW Step-up Integrated Machine



MV SKID GENERAL	
Transformer	
Rated Power (kVA)	2500
Transformer Model	Oil type
Transformer Vector	Dy11
Protection Level	IP54/ IP55
Anti-corrosion Grade	C4-H / C4-VH / C5-M / C5-H / C5-VH
Cooling Method	ONAN/ ONAF
Temperature Rise	60K (Top Oil) 65K (Winding) @40℃
Oil Retention Tank	None/ Galvanized steel
Winding Material	Aluminum/ Copper
Transformer Oil	25# /45# mineral oil/ Natural ester insulation oil
Transformer Efficiency	IEC standard/ IEC Tier-2
MV Operating Voltage Range (kV)	6.6~33±5%
Nominal Frequency (Hz)	50 / 60
Altitude (m)	Optional

Switchgear	
Switchgear Type	Ring Main Unit, CCV
Rated voltage (kV)	12/24/36
Insulating medium	SF6
Rated frequency (Hz)	50/60
Enclosure protection degree	IP3X
Gas tank protection degree	IP67
Gas leakage rate per year	≤0.1%
Rated Operating Current (A)	630
Switchgear Short Circuit Rating (kA/s)	20kA/3s/ 25kA/3s
Switchgear IAC (kA/s)	A FL 20kA 1S
PCS * 2	
DC Input Voltage Range (V)	1050~1500
Max. DC input Current (A)	1833
DC Voltage Ripple	< 1%
DC Current Ripple	< 3%
LV Nominal Operating Voltage (V)	690
LV Operating Voltage Range (V)	621~759
PCS Efficiency	98.50%
Max. AC Output Current (A)	1588
Total Harmonic Distortion Rate	< 3%
Reactive Power Compensation	Four quadrant operation
Nominal Output Power (kVA)	1750
Max. AC Power (kVA)	1897
Power Factor Range	>0.99
Nominal Frequency (Hz)	50 / 60
Operating Frequency (Hz)	45~55 / 55~65
Connection Phases	Three-phase-three-wire
Communication Interface	
Communication Method	CAN / RS485 / RJ45 / Optical fiber
Supported Protocol	CAN / Modbus / IEC60870-103 / IEC61850
Ethernet Switch Qty	One for standard
UPS	1kVA for 15min/ 1h/ 2h
Skid General	
Dimensions (W*H*D)(mm)	6058*2896*2438 (20ft)
Weight (kg)	19000
Protection Level	IP54
Operating Temperature (℃)	-35~60C, >45C derating
Storage Temperature (℃)	-40~70
Maximum Altitude (above sea level) (m)	5000, ≥3000 derating
Environment Humidity	0~ 100% , No condensation
Type of Ventilation	Nature air cooling/ Forced air cooling
Auxiliary Power Consumption (kVA)	11.6 (peak)
Auxiliary Transformer (kVA)	Without

5MW Step-up Integrated Machine



MV SKID GENERAL	
Transformer	
Rated Power (kVA)	5000
Transformer Model	Oil type
Transformer Vector	Dy11
Protection Level	IP54 / IP55
Anti-corrosion Grade	C4-H / C4-VH / C5-M / C5-H / C5-VH
Cooling Method	ONAN / ONAF
Temperature Rise	60K (Top Oil) 65K (Winding) @40℃
Oil Retention Tank	None / Galvanized steel
Winding Material	Aluminum / Copper
Transformer Oil	25# /45# mineral oil / Natural ester insulation oil
Transformer Efficiency	IEC standard / IEC Tier-2
MV Operating Voltage Range (kV)	6.6~33±5%
Nominal Frequency (Hz)	50 / 60
Altitude (m)	Optional

Switchgear	
Switchgear Type	Ring Main Unit, CCV
Rated voltage (kV)	12/24/36
Insulating medium	SF6
Rated frequency (Hz)	50/60
Enclosure protection degree	IP3X
Gas tank protection degree	IP67
Gas leakage rate per year	≤0.1%
Rated Operating Current (A)	630
Switchgear Short Circuit Rating (kA/s)	20kA/3s / 25kA/3s
Switchgear IAC (kA/s)	A FL 20kA 1S
PCS * 2	
DC Input Voltage Range (V)	1050~1500
Max. DC input Current (A)	1310*2
DC Voltage Ripple	< 2%
DC Current Ripple	< 3%
LV Nominal Operating Voltage (V)	690
LV Operating Voltage Range (V)	621~759
PCS Efficiency	98.7%
Max. AC Output Current (A)	1151*2
Total Harmonic Distortion Rate	< 3%
Reactive Power Compensation	Four quadrant operation
Nominal Output Power (kVA)	1250*2
Max. AC Power (kVA)	1375*2
Power Factor Range	>0.99
Nominal Frequency (Hz)	50 / 60 Hz
Operating Frequency (Hz)	45~55 / 55~65 Hz
Connection Phases	Three-phase-three-wire
Communication Interface	
Communication Method	CAN / RS485 / RJ45 / Optical fiber
Supported Protocol	CAN / Modbus / IEC60870-103 / IEC61850
Ethernet Switch Qty	One for standard
UPS	1kVA for 15min / 1h / 2h
Skid General	
Dimensions (W*H*D)(mm)	6058*2896*2438 (20ft)
Weight (kg)	24300
Protection Level	IP54
Operating Temperature (℃)	-35~60C, >45C derating
Storage Temperature (℃)	-40~70
Maximum Altitude (above sea level) (m)	5000, ≥3000 derating
Environment Humidity	0~ 100% , No condensation
Type of Ventilation	Nature air cooling / Forced air cooling
Auxiliary Power Consumption (kVA)	11.4 (peak)
Auxiliary Transformer (kVA)	Without

6.3MW Step-up Integrated Machine



MV SKID GENERAL	
Transformer	
Rated Power (kVA)	6300
Transformer Model	Oil type
Transformer Vector	Dy11
Protection Level	IP54 / IP55
Anti-corrosion Grade	C4-H / C4-VH / C5-M / C5-H / C5-VH
Cooling Method	ONAN / ONAF
Temperature Rise	60K (Top Oil) 65K (Winding) @40℃
Oil Retention Tank	None / Galvanized steel
Winding Material	Aluminum / Copper
Transformer Oil	25# /45# mineral oil / Natural ester insulation oil
Transformer Efficiency	IEC standard / IEC Tier-2
MV Operating Voltage Range (kV)	11~33±5%
Nominal Frequency (Hz)	50 / 60
Altitude (m)	Optional

Switchgear	
Switchgear Type	Ring Main Unit, CCV
Rated voltage (kV)	12/24/36
Insulating medium	SF6
Rated frequency (Hz)	50/60
Enclosure protection degree	IP3X
Gas tank protection degree	IP67
Gas leakage rate per year	≤0.1%
Rated Operating Current (A)	630
Switchgear Short Circuit Rating (kA/s)	20kA/3s / 25kA/3s
Switchgear IAC (kA/s)	A FL 20kA 1S
PCS * 4	
DC Input Voltage Range (V)	1050~1500
Max. DC input Current (A)	1833
DC Voltage Ripple	< 1%
DC Current Ripple	< 3%
LV Nominal Operating Voltage (V)	690
LV Operating Voltage Range (V)	621~759
PCS Efficiency	98.5%
Max. AC Output Current (A)	1588
Total Harmonic Distortion Rate	< 3%
Reactive Power Compensation	Four quadrant operation
Nominal Output Power (kVA)	1750
Max. AC Power (kVA)	1897
Power Factor Range	>0.99
Nominal Frequency (Hz)	50 / 60
Operating Frequency (Hz)	45~55 / 55~65
Connection Phases	Three-phase-three-wire
Communication Interface	
Communication Method	CAN / RS485 / RJ45 / Optical fiber
Supported Protocol	CAN / Modbus / IEC60870-103 / IEC61850
Ethernet Switch Qty	One for standard
UPS	1kVA for 15min / 1h / 2h
Skid General	
Dimensions (W*H*D)(mm)	12192*2896*2438 (40ft)
Weight (kg)	32400
Protection Level	IP54
Operating Temperature (℃)	-35~60C, >45C derating
Storage Temperature (℃)	-40~70
Maximum Altitude (above sea level) (m)	5000, ≥3000 derating
Environment Humidity	0~ 100% , No condensation
Type of Ventilation	Nature air cooling / Forced air cooling
Auxiliary Power Consumption (kVA)	21.4 (peak)
Auxiliary Transformer (kVA)	Without / With

10MW Step-up Integrated Machine



MV SKID GENERAL	
Transformer	
Rated Power (kVA)	10000
Transformer Model	Oil type
Transformer Vector	Dy11-y11
Protection Level	IP54 / IP55
Anti-corrosion Grade	C4-H / C4-VH / C5-M / C5-H / C5-VH
Cooling Method	ONAN / ONAF
Temperature Rise	60K (Top Oil) 65K (Winding) @40℃
Oil Retention Tank	None / Galvanized steel
Winding Material	Aluminum / Copper
Transformer Oil	25# /45# mineral oil / Natural ester insulation oil
Transformer Efficiency	IEC standard / IEC Tier-2
MV Operating Voltage Range (kV)	11~33±5%
Nominal Frequency (Hz)	50 / 60
Altitude (m)	Optional

Switchgear	
Switchgear Type	Ring Main Unit, CCV
Rated voltage (kV)	12/24/36
Insulating medium	SF6
Rated frequency (Hz)	50/60
Enclosure protection degree	IP3X
Gas tank protection degree	IP67
Gas leakage rate per year	≤0.1%
Rated Operating Current (A)	630
Switchgear Short Circuit Rating (kA/s)	20kA/3s / 25kA/3s
Switchgear IAC (kA/s)	A FL 20kA 1S
PCS * 4	
DC Input Voltage Range (V)	1050~1500
Max. DC input Current (A)	1310*2
DC Voltage Ripple	< 2%
DC Current Ripple	< 3%
LV Nominal Operating Voltage (V)	690
LV Operating Voltage Range (V)	621~759
PCS Efficiency	98.7%
Max. AC Output Current (A)	1151*2
Total Harmonic Distortion Rate	< 3%
Reactive Power Compensation	Four quadrant operation
Nominal Output Power (kVA)	1250*2
Max. AC Power (kVA)	1375*2
Power Factor Range	>0.99
Nominal Frequency (Hz)	50 / 60 Hz
Operating Frequency (Hz)	45~55 / 55~65 Hz
Connection Phases	Three-phase-three-wire
Communication Interface	
Communication Method	CAN / RS485 / RJ45 / Optical fiber
Supported Protocol	CAN / Modbus / IEC60870-103 / IEC61850
Ethernet Switch Qty	One for standard
UPS	1kVA for 15min / 1h/ 2h
Skid General	
Dimensions (W*H*D)(mm)	12192*2896*2438 (40ft)
Weight (kg)	38800
Protection Level	IP54
Operating Temperature (℃)	-35~60C, >45C derating
Storage Temperature (℃)	-40~70
Maximum Altitude (above sea level) (m)	5000, ≥3000 derating
Environment Humidity	0~ 100% , No condensation
Type of Ventilation	Nature air cooling / Forced air cooling
Auxiliary Power Consumption (kVA)	21 (peak)
Auxiliary Transformer (kVA)	Without / With