			Title		
			System Interface Specification (PS026-605P)		
	RESPONSIBLE	DATE	SIZE	DOCUMENT NO.	REV
AUTHORS			A4	P400-5024	00
USER					
RELEASE			MANUAL CHANGE PROHIBITED		SHEET 1 OF 4

System Interface Specification


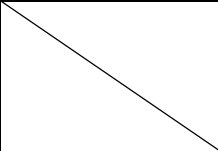
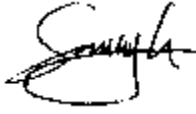
PS026-605P, 26.0kWh ESS with PCS

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1. Battery System Parameters

Specific parameters for the battery system blocks are detailed in the chart below

Parameter	Units	Specification	Note
Cell	Ah	25	SPB58253172V3
Series		144	One battery rack
Parallel		2	One battery rack
Cell Voltage			
Max	V	4.2	At 100% SOC
Nom	V	3.7	At 50% SOC
Min	V	2.7	At 0% SOC
Cell Capacity			
Rated	Ah	25	From cell specification
Battery Configuration			
Cell Modules	Modules	12	Each cell module contains 24 cells (12s2p)
Battery Capacity (BOL)			
Theoretical	Ah	50	Calculated based on cell capacity
Battery Capacity (EOL)			
Theoretical	Ah	35	Estimated at 70%
Battery Voltage			
Max	V	604.8	Determined at maximum cell voltage
Nom	V	532.8	Determined at nominal cell voltage
Min	V	388.8	Determined at minimum cell voltage
Battery Energy			
Theoretical	kWh	26.6	Calculated value based on theoretical system capacity
Usable (typical)	kWh	16	Estimated energy between 20% and 80% SOC, de-rated specific to system application
Usable (max)	kWh	21.8	Estimated energy between 8% and 90% SOC, de-rated specific to system application
Battery Discharge Power			
Standard	kW	8	At nominal system voltage (15A*532.8V)
Max	kW	26.6	At nominal system voltage (50A*532.8V)
Battery Charge Power			
Standard	kW	8	At nominal system voltage (15A*532.8V)
Max	kW	26.6	At nominal system voltage (50A*532.8V)
Battery Discharge Current			

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Parameter	Units	Specification	Note
Standard	A	15	Continuous between 20% and 100% SOC, specific to system application
Max	A	50	Continuous between 20% and 100% SOC (system maximum continuous)
Battery Charge Current			
Standard	A	15	Continuous between 0% and 80% SOC, specific to system application
Max	A	50	Continuous between 0% and 80% SOC (system maximum continuous)
System input			
Input AC voltage		380Vac, 3Ø4W, 60Hz	Within 10% of voltage fluctuation rate
Charging power	kW	10	Max
Charging voltage	Vdc	604.8	Adjustable within limit
Max Charging current	A	30	Adjustable within limit
Charging mode		CC-CV	
System output			
Output AC voltage		380Vac, 3Ø4W, 60Hz 220Vac(For each R,S,T)	Within 10% of voltage fluctuation rate
Output power	kW	10	Max
Efficiency	%	>95	
Transfer time	ms	< 10	At blackout
Operating Temperature/Humidity			
Max	% RH	85	Range (cell min/max)
Min	% RH	45	Range (cell min/max)
Max(Discharge)	Degrees °C	55	Zero Current Limited Above Max Operating Temp
Min(Discharge)	Degrees °C	(-)20	Zero Current Limited Below Min Operating Temp
Storage Temperature	Degrees °C	(-)20 to 25 <1year	Range (cell min/max)
Pre-Charge	Type	Internal	HV Load Capacitance protection
GFD		Enabled	BMS Isolated Diagnostics
Emergency stop		Enabled	Emergency Power OFF
Miscellaneous			
Application		UPS	
Interface	protocol	RS485	RS485 communication with external device
Protection		MLEC(BMS)	MLEC(BMS) protect battery from abnormal condition.
Enclosure	Type	Rack	19" standard rack
IP		N/A	Need additional outdoor rack
Mass	kg	553	Approximate calculated value (Battery racks=325kg, One BCP rack=228kg)

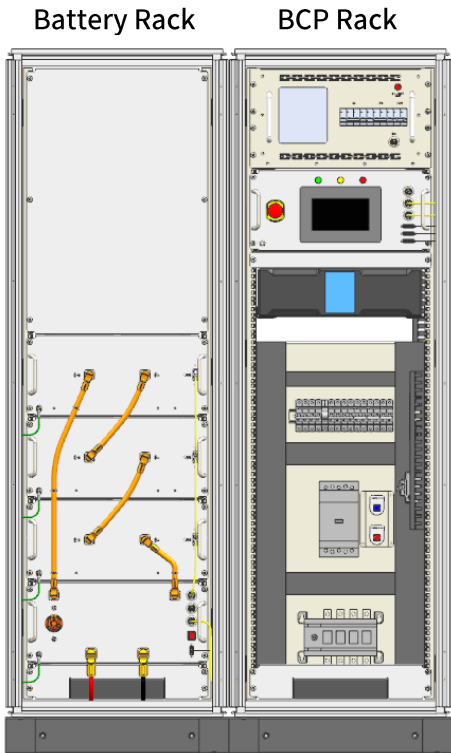
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Parameter	Units	Specification	Note
Battery Shelf Life	years	5	Continuous between 20% and 80% SOC
Cell Balancing	Type	Dissipative	BMS Temperature Diagnostics
Thermal Management	Type	Limit Controlled	BMS Current Limited above normal cell operating temperature

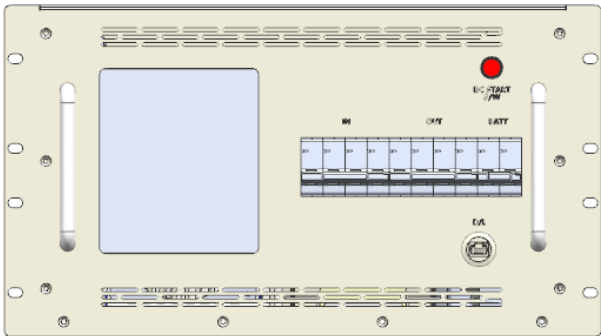
Table 1 Product Technical Specifications

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2. Mechanical Drawings



Item	Width(mm)	Depth(mm)	Height(mm)	Weight(kg)
Battery Rack	600	1,200	1,900	310
BCP Rack	600	1,200	1,900	230



Item	Width(mm)	Depth(mm)	Height(mm)	Weight(kg)
Charger	487	605	270	45

Figure 1 Pack Outline Drawing