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EENERIECH		System Interface Specification (PS040-907)			
	RESPONSIBLE	DATE	SIZE	DOCUMENT NO.	REV
AUTHORS				P400-5058	00
USER			A4	P400-5058	00
RELEASE			MANUAL CHANGE PROHIBITED SHEET 1 OF 4		SHEET 1 OF 4

## System Interface Specification

PS040-907, 39.95kWh 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		216	One battery rack			
Parallel		2	One battery rack			
Battery Configuration	Battery Configuration					
Cell Modules	Modules	18	Each cell module contains 24 cells (12s2p)			
Battery Capacity (BOL)						
Rated	Ah	50	Calculated based on cell capacity			
Battery Capacity (EOL)						
Rated	Ah	35	Estimated at 70%			
Battery Voltage						
Max	V	907.2	Determined at maximum cell voltage			
Nom	V	799.2	Determined at nominal cell voltage			
Min	V	583.2	Determined at minimum cell voltage			
Battery Energy						
Rated	kWh	39.96	Calculated value based on theoretical system capacity			
Battery Discharge Power						
Standard	kW	12	At nominal system voltage (15A*799.2V)			
Max	kW	39.96	At nominal system voltage (50A*799.2V)			
Battery Charge Power						
Standard	kW	12	At nominal system voltage (15A*799.2V)			
Max	kW	39.96	At nominal system voltage (50A*799.2V)			
Battery Discharge Current						
Standard	Α	15	Continuous between 20% and 100% SOC			
Max	А	50	Continuous between 20% and 100% SOC			
Battery Charge Current						
Standard	А	15	Continuous between 0% and 80% SOC			
Max	Α	50	Continuous between 0% and 80% SOC			
Miscellaneous						
Mass	kg	500	Approximate calculated value			
Battery Shelf Life	years	5	Continuous between 20% and 80% SOC			
Operating Temperature/Humi	dity					
Max	% RH	85	Range (cell min/max)			
Min	% RH	45	Range (cell min/max)			
Max	Degrees °C	55	Zero Current Limited Above Max Operating Temp			
Min(Discharge)	Degrees °C	(-)20	Zero Current Limited Below Min Operating Temp			
Min(Charge)	Degrees °C	0	Zero Current Limited Below Min Operating Temp			
Storage Temperature	Degrees °C	(-)20 to 25 <1year	Range (cell min/max)			
System input	System input					
Input AC voltage		380Vac, 3Ø4W, 60Hz	Within 10% of voltage fluctuation rate			
	<u> </u>		<u> </u>			

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Parameter	Units	Specification	Note
Charging power	kW	10	Max
Charging voltage	Vdc	604.8	Adjustable within limit
Max Charging current	А	30	Adjustable within limit
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
Miscellaneous			
Application		UPS	
Interface	protocol	RS485	RS485 communication with external device
Enclosure	Туре	Rack	19" standard rack
IP		N/A	Need additional outdoor rack

**Table 1 Product Technical Specifications** 

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## 2. Mechanical Drawings





Parameter	Unit	Value
X Dimension	mm	1,060
Y Dimension	mm	642
Z Dimension	mm	2,000
Mass	kg	500

Figure 1 Pack Outline Drawing