

## | Module



## | Rack



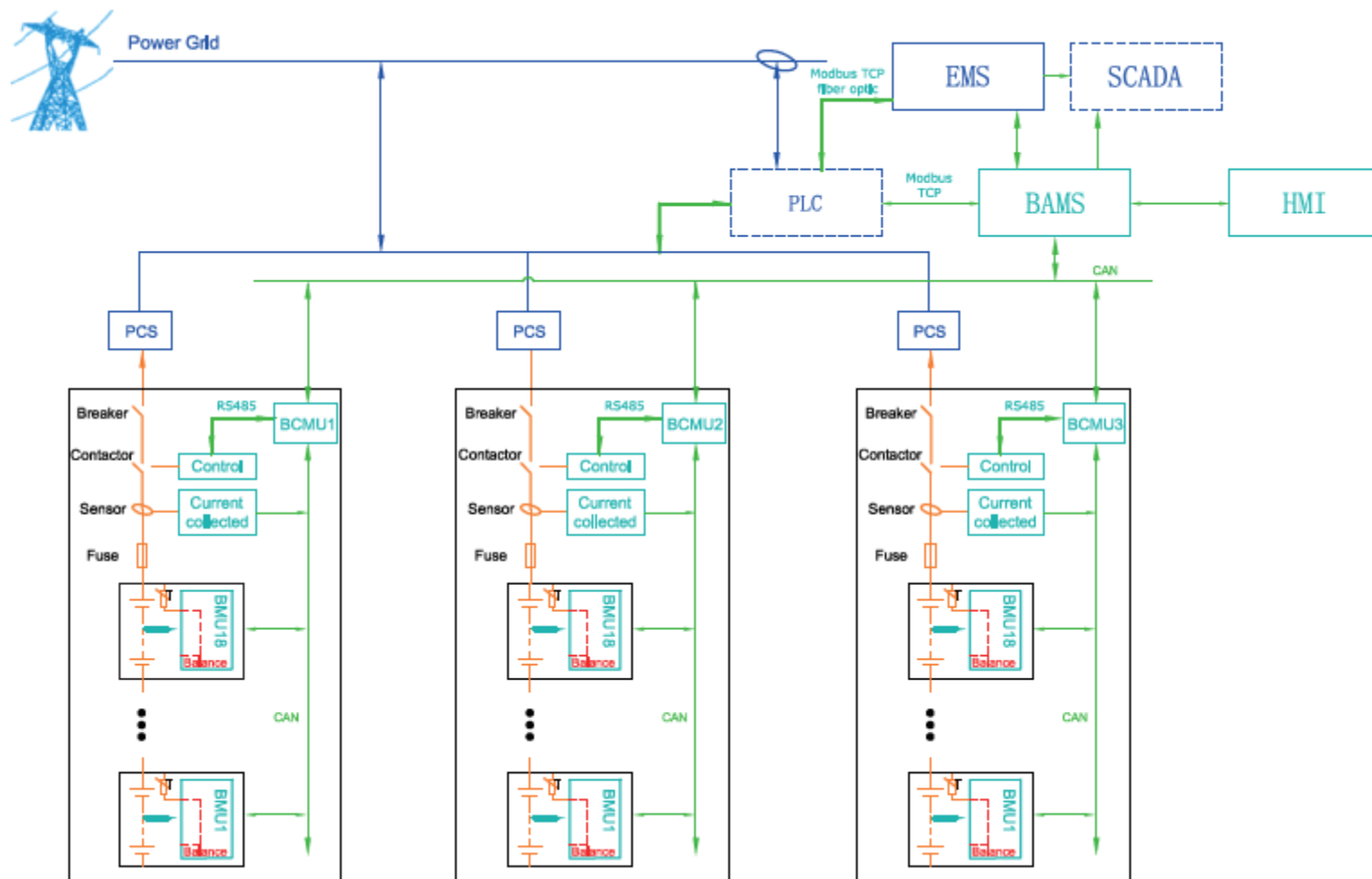
## | Features of Module & Rack Design

1. Platform Design for Energy, Medium and Power Solutions
2. 0.5C to 2C options available for Frequency regulation, Peak Shaving, Energy Reserve, etc
3. The Highest Energy density for LFP Energy Solution to optimize footprint and BOP cost
4. Passive & Active Thermal Ventilation System, Designed in both Module & Rack
5. Particular Considering for Containerized solution with proper aisle space
6. The Highest Lifetime Performance for Energy Storage System

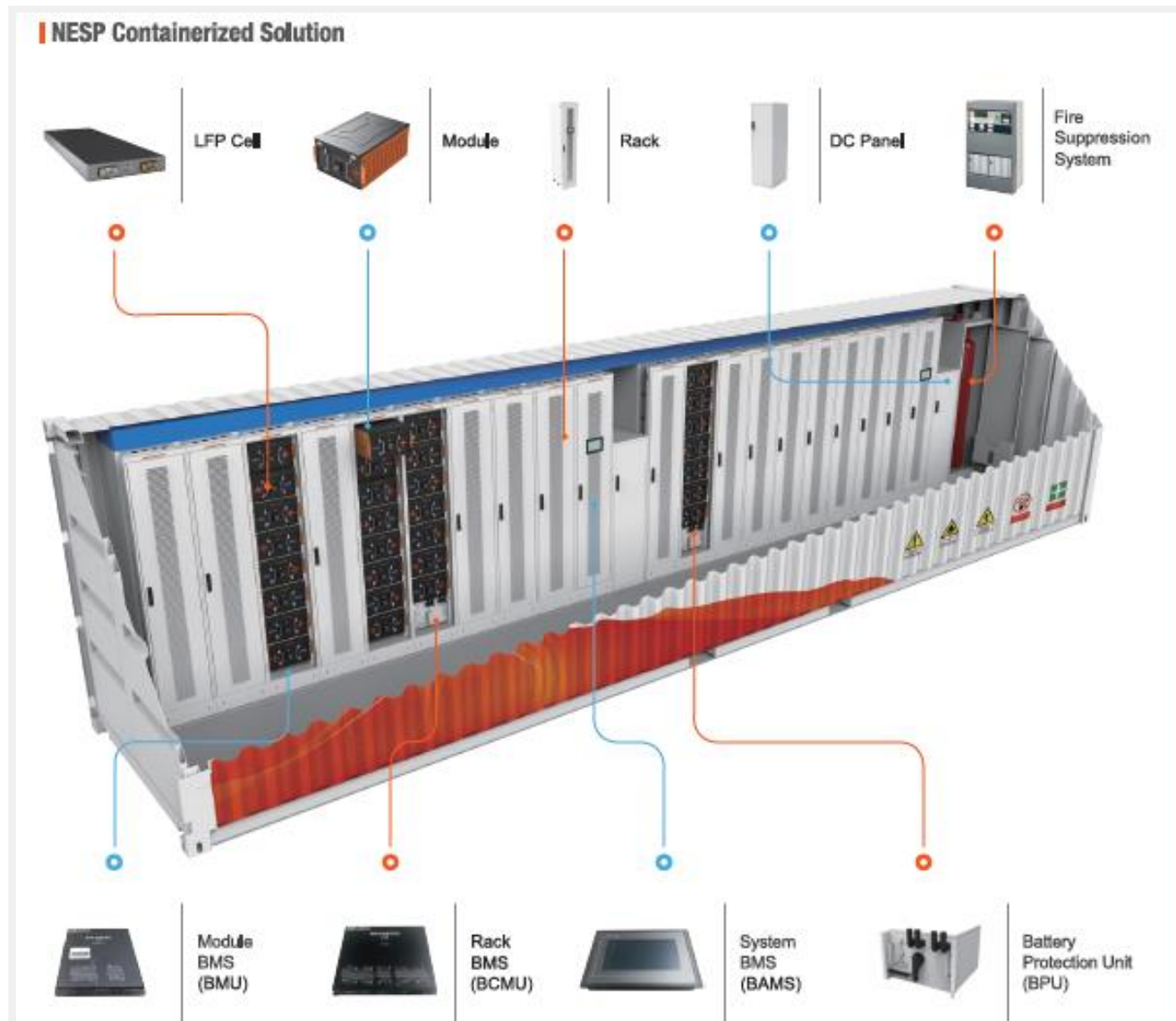
## BMS

### BMS Function

1. Battery working condition Monitoring
2. State of Charge (SOC) estimation
3. State of Health (SOH) estimation
4. Discharge Control
5. Thermal Management
6. Fault Diagnosis Alarm
7. Information Monitor
8. Balance
9. Protection



# Narada Lithium Solutions



## COMPLETED NESP BESS

### D.C. System

- Cell
- Module
- Rack
- BMS (Module, Rack, System)
- Battery Protection Unit
- Container
- DC Panel
- HVAC System
- Fire Suppression System














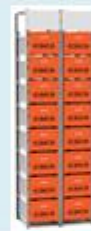

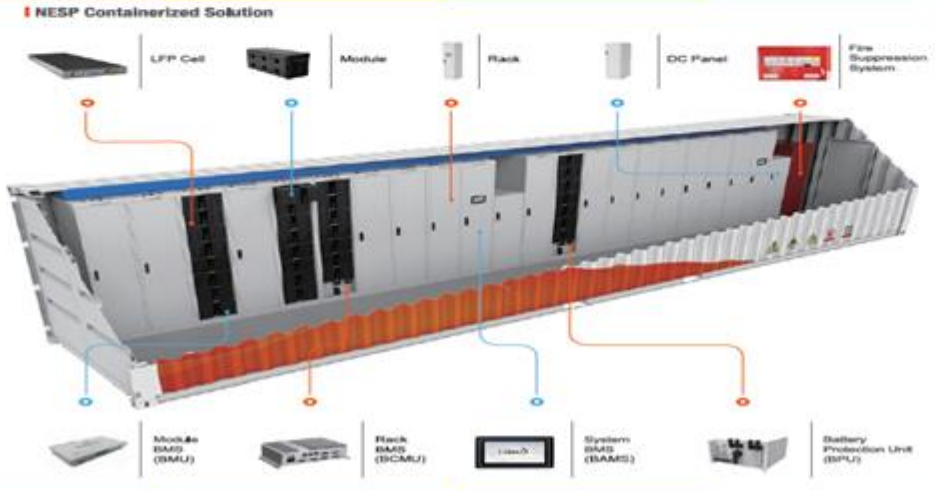

### A.C. System



PCS Partner List: Siemens, SMA, Sungrow, etc.

KPI for choosen: Country Certificate, Product Type, System Cost, Client Requirement, etc.

# Roadmap: General Introduce

Brand	Exreme High Power (10min)	High Power <1hr	Energy/Power 1-2hr	High Energy >2hr	Extreme High Energy (>4h)	Features	
	 FE55A	 FE80B	 FE105A	 FE125A	 REXC	36130240 one cell platform cover 0.5C-2C applications	
	 1P16S55	 2P16S160	 2P16S200	 2P16S250		2P16S 51.2NESP—款模组覆盖 0.5C-2C	
	 5125588	 512160132	 512200161	 512250192	 561200067	Rack design consider: Standarded, integrated, modulized and airflow chanel	
							Container design: Standard modules and components; Standard & flexiable

## Roadmap: High Power type 5C 55Ah 2.8kWh

Items	Parameters
Rated Energy	55Ah (2.816 kWh)
Connections	1P16S
Nominal Voltage	51.2V
Mini Voltage	43.2V
Max Voltage	57.6V
Max Charge Current	300A (5.45C)
Maxi Discharge Current	300A (5.45C)
Size (W*H*D)	442*140*450
Cooling	Forced
Weight	35KG





## Roadmap: High Power Rack

Items	High Power Type
Rated Energy	55Ah (88 kWh)
Connections	10
Nominal Voltage	512V
Mini Voltage	448V
Max Voltage	576V
Max Discharge Current	275A (5C)
Maxi Discharge Power	140.8kW
Size (W*H*D)	600*600*2000 (*1)
Cooling	Forced
Weight	400kg



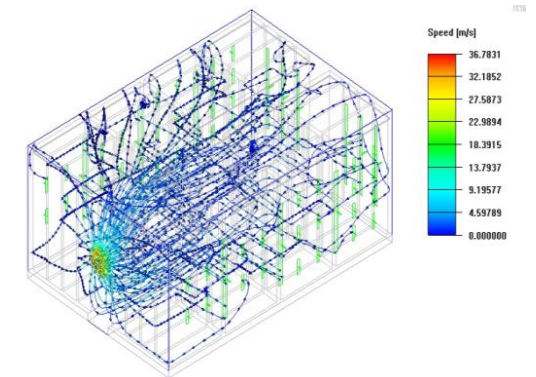
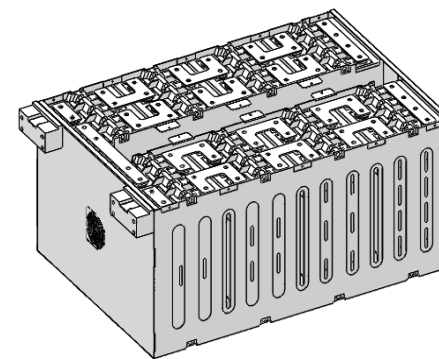
备注：图片只展示效果，不展示风道设计

# Roadmap: Energy Type Module 51.2NESP250 12.8kWh

Items	Energy type
Rated Energy	250Ah (12.8 kWh)
Connections	2P16S
Nominal Voltage	51.2V
Mini Voltage	43.2V
Max Voltage	57.6V
Max Current	250A (1C)
Applications (Duration)	1h-2h
Size (W*H*D)	371*600*265
Cooling	Forced
Weight	93.5KG



Note: Only Appearance

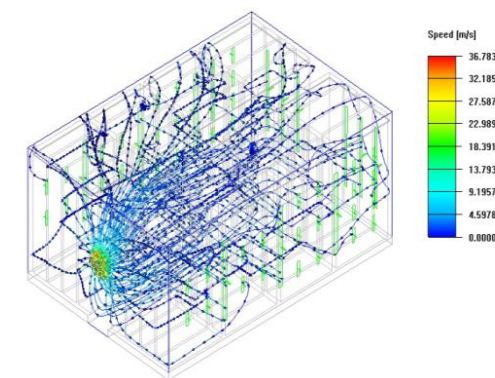
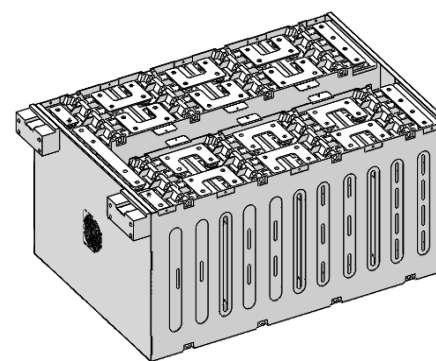


## Roadmap: Energy Type Module 51.2NESP160 8.2kWh

Items	Power Type
Rated Energy	160Ah (8.2 kWh)
Connections	2P16S
Nominal Voltage	51.2V
Mini Voltage	43.2V
Max Voltage	57.6V
Max Current	320A (2C)
Applications (Duration)	0.5h-1h
Size (W*H*D)	371*600*265
Cooling	Forced
Weight	74.5KG



Note: Only Appearance





## Roadmap: Energy & Power Type Rack

Items	Energy Type Rack	Power Type Rack
Rated Energy	250Ah (192 kWh)	160Ah (122 kWh)
Connections	15	15
Nominal Voltage	768V	768V
Mini Voltage	672V	672V
Max Voltage	864V	864V
Max Current	250A (1C)	320A (2C)
Applications (Duration)	1h-2h	0.5h-1h
Size (W*H*D)	500*630*2200 (*2)	500*630*2200 (*2)
Cooling	Forced	Forced
Weight	1.9Ton	1.6Ton



Note: Only Appearance