

NOVGERA

# Battery Storage Solutions

**Our Roku Battery Energy Storage Solutions are designed to meet our customers energy needs across many applications.**

# We provide market leading Battery Energy Storage Systems



Battery energy storage demands are growing and the demands for battery energy storage (BESS) is projected to increase significantly by 2030. To meet this growing demand we provide our Roku BESS to meet our customers needs across many scenario applications.

# Battery Energy Storage Solutions

Roku is a pre-fabricated large scale energy storage system which is customised for renewable energy power plants as well as national grid related applications. Roku consists of sets of standard battery strings and it is equipped with fire protection alongside electrical units which comply with international related standards. To increase the service life of the container there is an environmental control system, Additional safety features include: intelligent battery management technologies.

## ROKU use cases:

- Frequency regulation
- Renewable energy load arbitration
- Utility and Large Critical Infrastructure
- Demand Charge Management
- Customer Self Supply
- Micro Grid Solutions
- Back up power

## Product Features

- Supports on-grid/off grid applications
- Highly integrated
- Enables active /passive balancing
- Built in inverter + solar charge controller and lithium battery
- Turnkey storage solution

ENERGY  
STORAGE SYSTEM

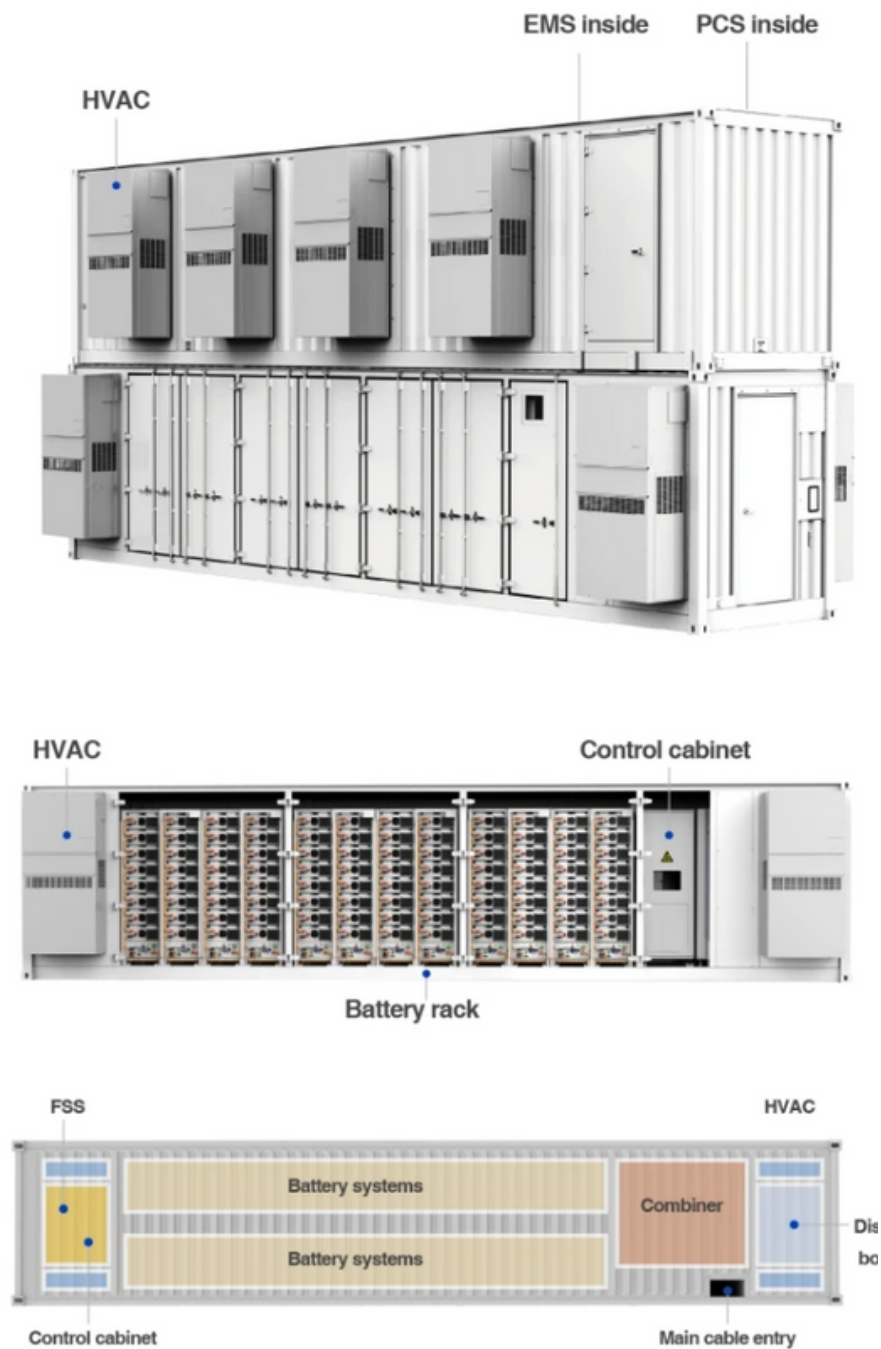
# Roku Technical Capacity

Roku is an Energy Storage Container ESS with an all In One battery energy storage system with a solar inverter. The capacity can be customised to the consumer needs between 1 - 3 MW/h.

DC SIDE			
System	Module	Rack	Bank
Rated capacity	280Ah	280Ah	6720Ah
Rated operating voltage	64V	512V	512V
Voltage range	56~72V	448~576V	448~576V
Rated charging & Discharging current	140A	140A	3360A
Rated energy	17.92kWh	143.36kWh	3440kWh
AC SIDE			
Power	2400kVA		
Input voltage	480V		
Input frequency	60Hz		
Power factor	0.99		
Output voltage	480V		
Output frequency	60Hz		
SYSTEM PARAMETERS			
BESS Container Dimensions (W*D*H)	12192*2438*2896mm		
UPS Container Dimensions (W*D*H)	12192*2438*2896mm		
BESS Container Weight	42t		
UPS Container Weight	20t		
Ingress Rating	IP54 / NEMA3R		
Operating Temperature	-30~60°C		
Operating Humidity	0~95%, Relative humidity		
Altitude	≤2000m		
BMS Communication	CAN / RS485 / Ethernet		
UPS Communication Protocol	Modbus RTU, Modbus TCP/IP		
COMPLIANCE AND STANDARDS			
UPS Container	CSA SPE-1000, IEC 62040-2 (category C3), ISO 9001: 2008, ISO14001: 2004		
BESS Container	IEC62619, UN38.3, UL1973, UL9540, UL9540A		

# Battery Storage Configuration

We provide a completely customised battery configuration to meet our customer's application needs



# Customised Solutions

We provide a completely customised battery configuration to meet our customer's application needs. We meet customer needs across many scenarios including demand charge management, customer self supply, micro-grids and back up power.

