Container-type and off-grid energy storage system with CGN

- Energy storage capacity: 6MWh
- Location: Gonghe County of Qinghai Province
- System functions: new energy storage access, smooth access, to solve the problem of no electricity

Lin'an solar and energy storage integration container-type and on-grid system

- Energy storage capacity: 2MWh
- Location: Hangzhou Lin'an Economic Development Zone
- System functions: new energy storage system access, load shifting, power smoothing

Container-type and on-grid micro energy storage system with China CNR

- Energy storage capacity: 275KWh
- Location: Beijing, China CNR twenty-seven rail company
- System functions: load shifting, energy centralized management

Inner Mongolia Wind Farm Huitengxile Wind Power Project

- Energy storage capacity: 100KW / 270KWh
- Location: Inner Mongolia Wind Farm Huitengxile
- System functions: to smooth the wind power and Energy storage problems

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Narada®

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Narada®

The advanced leader in Energy Storage Industry

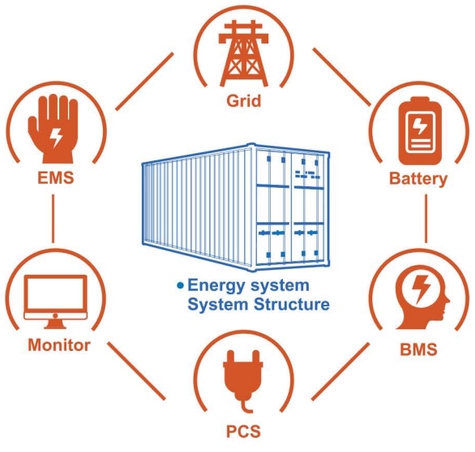
BESS series

Container-type and movable energy storage power station

THE SOLUTION OF CONTAINER-TYPE AND MOVABLE ENERGY STORAGE POWER STATION

System Overview

Container-type and movable energy storage power station system consists of international advanced lead-carbon energy storage technologies, intelligent battery management system, efficient and reliable power control system and commutation systems, and intelligent energy scheduling management systems. Provide safe, reliable and stable power supply solution with complete systems of distributed power and comprehensive and quality power solutions.



System features

- Turnkey Solution
- One-stop and assured service
- Customized products
- Integrated protection design

Product characteristics and advantages

Modular design

System capacity standardization
Reliable safety protective
High mechanical strength and good maneuverability
As emergency power source with the Plug and Play feature

Control System

Operability in Grid or off-grid with anti-islanding function
Providing active and reactive power output
Low voltage crossing and fast response
Programmable, flexible and modular
High reliability and secure network
Local monitoring and remote monitoring

Energy storage unit

Advanced lead-carbon energy storage technology
Rapid system response
High system efficiency
Cost-effective

Applications areas

New energy source access

Power control
Reduce the abandoned wind and abandoned light
Prediction and molding
Load shifting

Provide grid services

Transmission and Distribution Application
Load shifting
Voltage support
Improve power quality
Improve grid reliability
Tracking load and Planing power generation

Auxiliary services

Power adjustment
Voltage adjustment
Frequency adjustment
Black start function

Narada®

ESS SYSTEM	BESS-500C	BESS-500L	BESS-1000C	BESS-1000L

SYSTEM PARAMETERS

Energy storage installed capacity	250KWh	250KWh	500KWh	500KWh
Energy storage Installed Power	500KW	500KW	1000KW	1000KW
On-grid voltage	315V±10%	315V±10%	315V±10%	315V±10%
On-grid frequency	49.5~50.2Hz/49.5~60.2Hz	49.5~50.2Hz/49.5~60.2Hz	49.5~50.2Hz/49.5~60.2Hz	49.5~50.2Hz/49.5~60.2Hz
Wiring Mode	Three-phase and three-wire	Three-phase and three-wire	Three-phase and three-wire	Three-phase and three-wire
Operation Mmode	On-grid	On-grid	On-grid	On-grid
Max. System efficiency	98.5%	98.5%	98.5%	98.5%
Container Dimensions	40 feet container for battery, and PCS	40 feet container for battery, and PCS	40 feet container for battery, and 20 feet container for PCS	40 feet container for battery, and PCS
Total container number	1	1	2	1
Fire Fighting System	Yes	Yes	Yes	Yes
Protection class	IP54	IP54	IP54	IP54

ENERGY STORAGE INVERTER PARAMETER

Rated power	500KW	500KW	1MW	1MW
Rated output voltage	500V-880V	500V-880V	500V-880V	500V-880V
Overload ability	1.2P/1min	1.2P/1min	1.2P/1min	1.2P/1min
THD	<3%	<3%	<3%	<3%
Power factor	≥0.99	≥0.99	≥0.99	≥0.99
Communication Interface	RS485/CAN/Ethernet	RS485/CAN/Ethernet	RS485/CAN/Ethernet	RS485/CAN/Ethernet
Communication Protocol	TCP/MODBUS/IEC61850	TCP/MODBUS/IEC61850	TCP/MODBUS/IEC61850	TCP/MODBUS/IEC61850
Discharge and Charge conversion time	≤50ms	≤50ms	≤50ms	≤50ms
Seamless switching time	≤20ms	≤20ms	≤20ms	≤20ms
Conversion efficiency	≥98%	≥98%	≥98%	≥98%

ENERGY STORAGE BATTERY SYSTEM

Battery Type	Lead-Carbon Battery	Lithium Battery	Lead-Carbon Battery	Lithium Battery
Rated voltage	600V	691.2V	672V	691.2V
Operating voltage range	540-690V	583.2V-788V	567V-725V	583.2V-788V
Energy storage Rated capacity	300KWh	311KWh	504KWh	518KWh
Cycle life	5000Cycles@40%DOD	6000Cycles@60%DOD	5000Cycles@40%DOD	6000Cycles@60%DOD
Battery Management System	Yes	Yes	Yes	Yes

Due to the improvement of product and technology, Please forgive the change of specifications and appearance without notice, Narada hold the final interpretation.