

Utility On Grid ESS

Utilities Product Platform

1. Latest integration technology:

Utilities projects require fast installation and commissioning of 20ft and 40ft battery containers, as well as other modular design to ensure integration in the field.

2. Top level energy density:

JESS is constantly striving for higher energy density solutions that offers more than 5mwh of energy in a 40ft container. This is possible through energy density cell, and pack design.

Product life:

Ability to model different application scenario. To use historical data, we can optimize system life design.

20ft and 40ft
integration in

offers more than
energy density cell,

historical data, we

tion and deployment

lar design, flexible configuration,
multiple scenarios

Application

Ancillary services

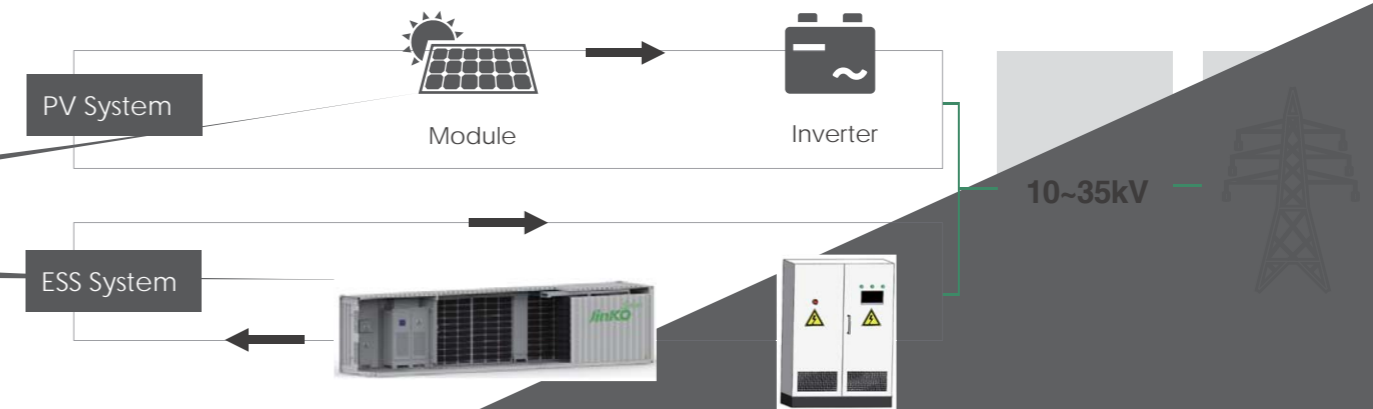
Transmission and
distribution services

Behind-the-meter
ployment energy
management

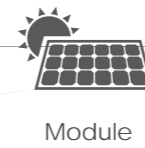
Microgrid applications



Circuit Diagram



PV System



Module



Inverter

ESS System

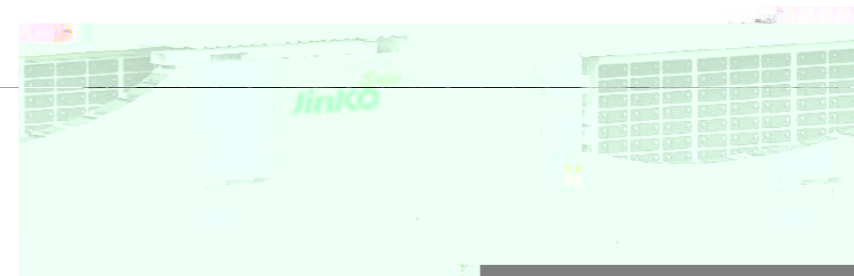


10~35kV



Energy Storage Container Configuration

System could be designed according to different Pack/Rack combination.



Rated Energy	2.39MWh	3.50MWh	4.0MWh
Rated Voltage	665.6V	729.6V	716.8V
Operating voltage range	582.4-748.8V	638.4-820.8V	627.2-806.4V
Operating ambient temperature range	-20 45		
DC efficiency	94% (Max)		
Altitude	2000m/ 5000m		
Cycle life	4000 25 , 1C charge/discharge, 80%DOD, EOL 80% , 6000 25 , 1C charge/discharge, 60%DOD, EOL 70%		
Calendar life	10 years		
Rated charge/discharge C rate	1C		0.5C

PCS + Battery

Utility ESS System Specification



Power/Capacity	500kW/1MWh	1MW/1MWh	1.26MW/2.74MWh	2MW/2.21MWh
AC Rated Voltage	400V	315V	315V	315V
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
DC Rated Voltage	716.8V	716.8V	652.8V	614.4V
Connection Mode	3-phase 4-wire	3-phase 3-wire	3-phase 3-wire	3-phase 3-wire
Isolation Mode	Transformer	Transformerless	Transformer	Transformerless
Operating ambient temperature range	-20-45			
Allowable relative humidity range	5~95%non-condensing			
Altitude	2000m			
Cycle life	4000 25 , 1C charge/discharge, 80%DOD, EOL 80% , 6000 25 , 1C charge/discharge, 60%DOD, EOL 70%			
Calendar life	10 Years			
AC Efficiency	88%			
Protection Degree	IP54			
20 Foot high container	1	1	\	\
40 Foot high container	\	\	1	1