

# Utility On Grid ESS

## Utilities Product Platform

### 1. Latest integration technology:

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

### 2. Top level energy density:

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

### Product life:

JESS can help you model different application scenarios. To optimize system life design, we use historical data, we can help you optimize system life design.

## Application

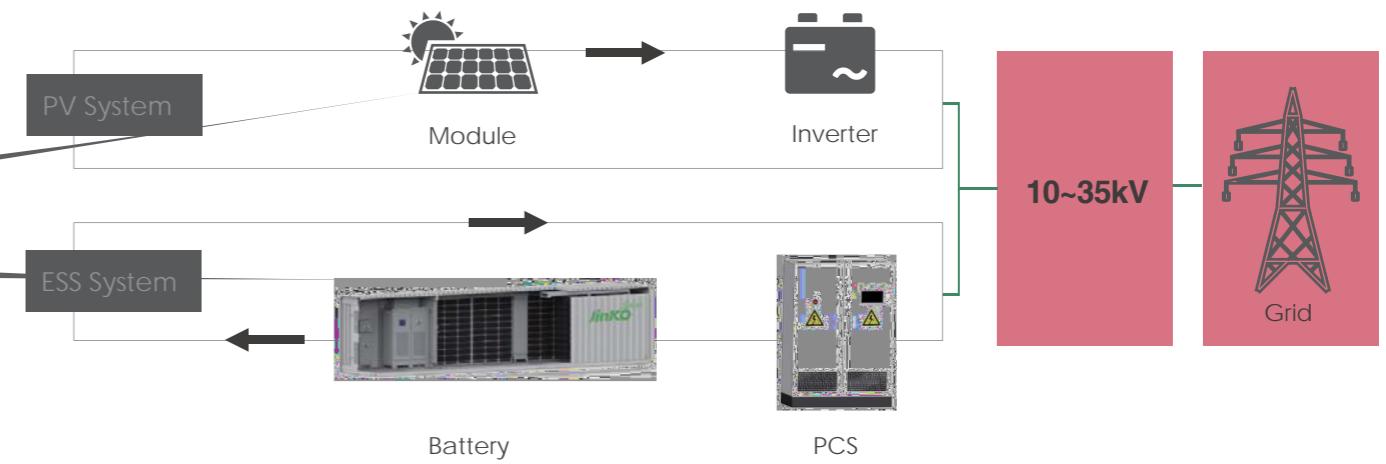
Ancillary services

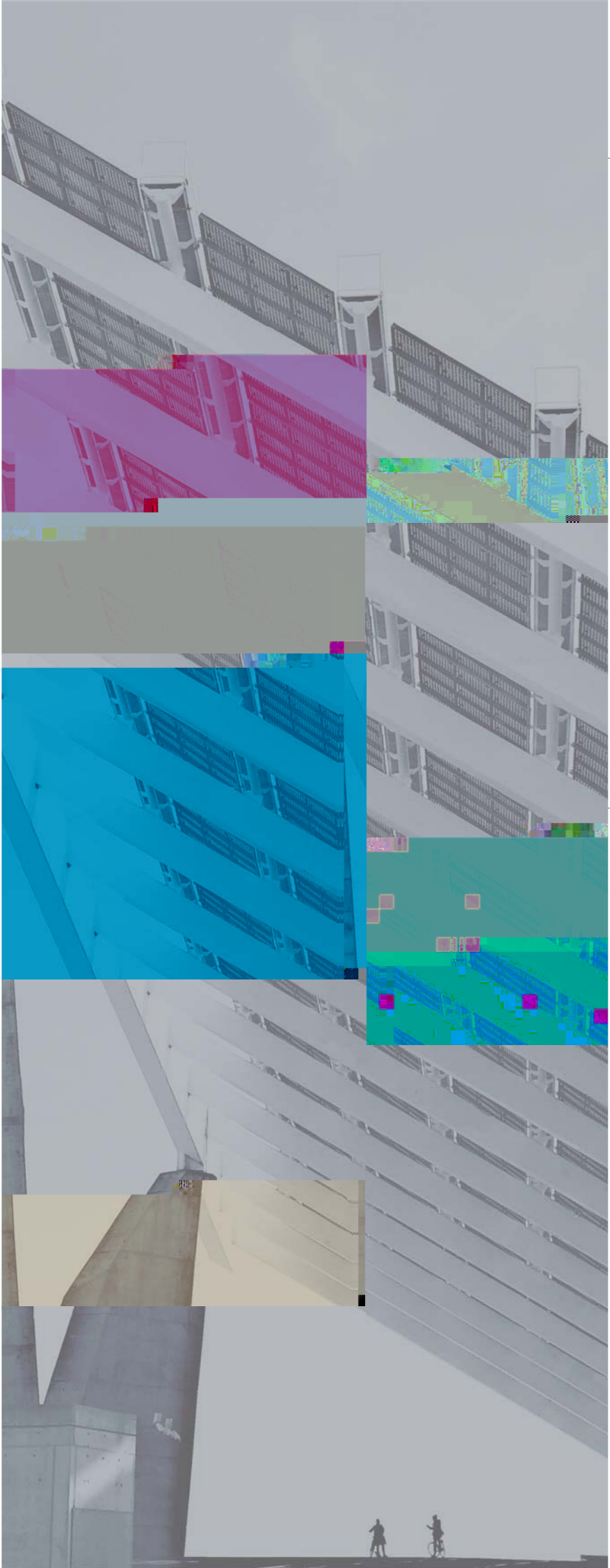
Transmission and distribution services

Behind-the-meter deployment energy management

Microgrid applications

## Circuit Diagram





## Energy Storage Container Configuration

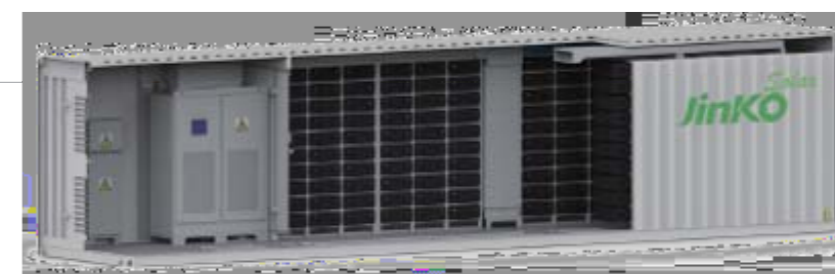
System could be designed according to different Pack/Rack combination.



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