

# Utility and ESS

## Utilities Project

### 1. Latest integration

Utilities projects require quick installation and commissioning. Jinko offers standard 20ft and 40ft battery containers, and a modular design to ensure quick transportation and integration in the field.

### 2. Top level energy

JESS is constantly seeking to improve energy density solution. Our latest design offers more than 5mwh of energy in a 40ft container, made possible through selection of high energy density cell, and pack design.

### 3. Long product life

We extensively monitor system performance in various scenarios. Together with project historical data, we are able to maximize system life and efficiency.

Multi



Rapid installation and deployment



Modular design, flexible configuration, suitable for multiple scenarios

## Application

Ancillary services

Transmission and distribution services

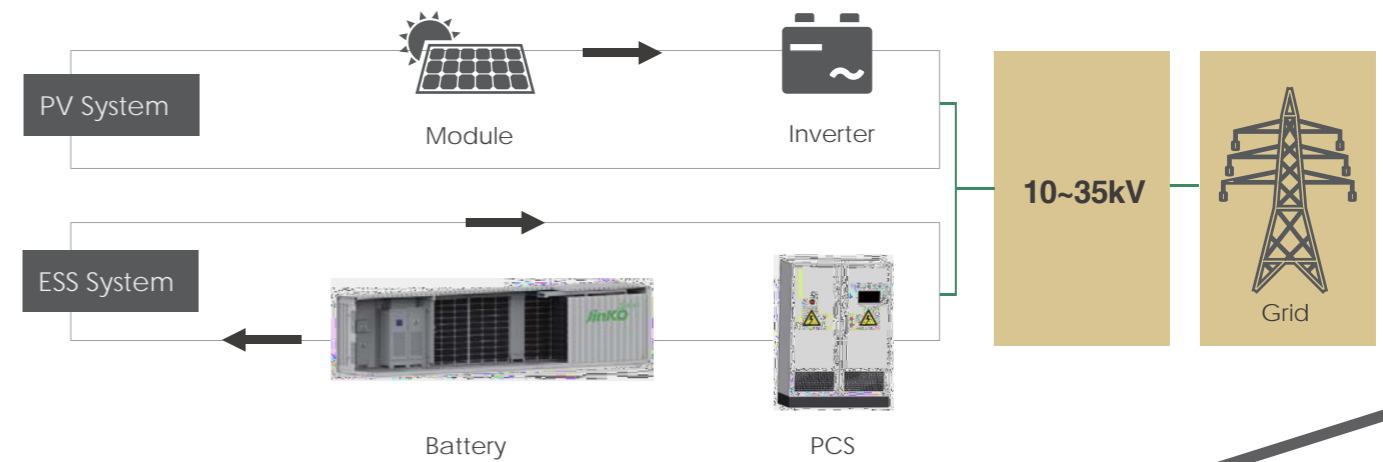


Behind-the-meter deployment energy management

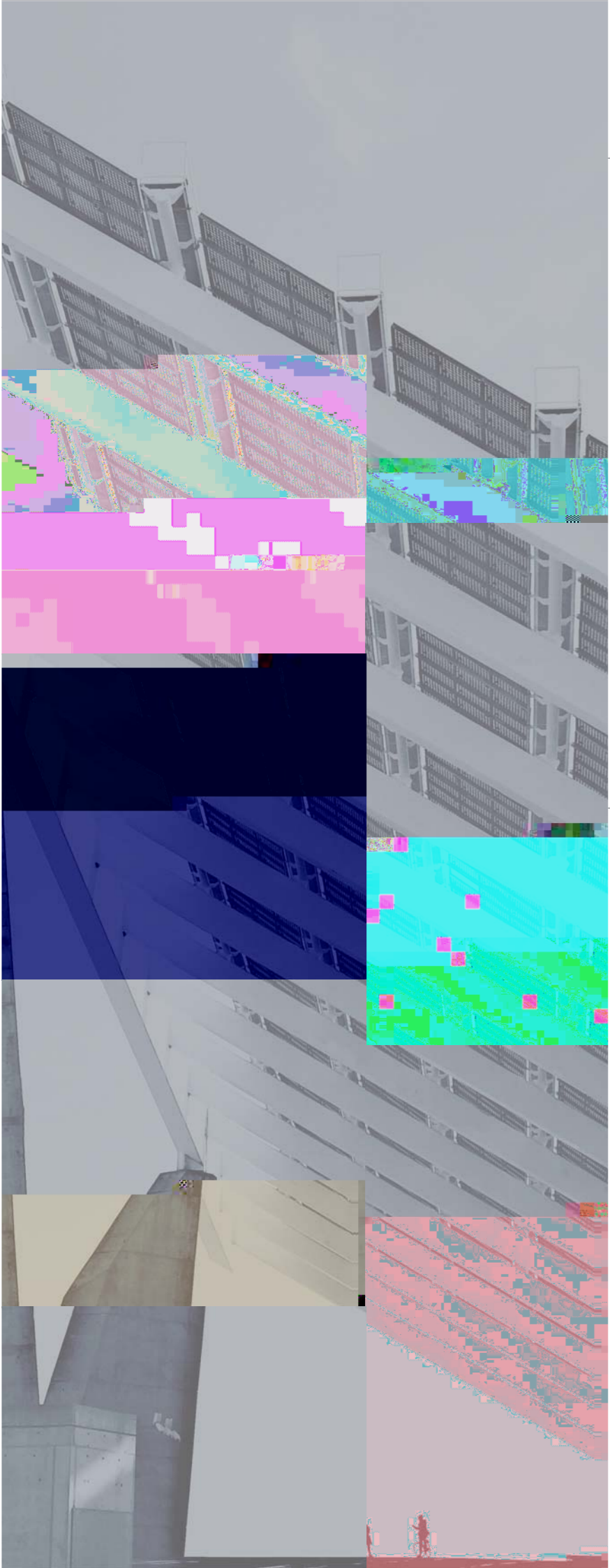


Microgrid applications

## Circuit Diagram



Battery Energy Storage System



## 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