# Utility On Grid ESS

## Utilities Product Platform

**1. Latest integration technology:**
Utilities projects require fast installation and commissioning. Jinko offers standard 20ft and 40ft battery containers, as well as other modular design to ensure quick transportation and integration in the field.

**2. Top level energy density:**
JESS is constantly striving for higher energy density solutions. Our latest design offers more than 5mwh of energy in a 40ft container. This is possible through selection of high energy density cell, and pack design.

**3. Long product life:**
We extensively model different application scenario. Together with project historical data, we are able to maximize system life design.

Multilevel protection strategy

Rapid installation and deployment

Integrated battery platform with safety and reliability

Modular design, flexible configuration, suitable for multiple scenarios

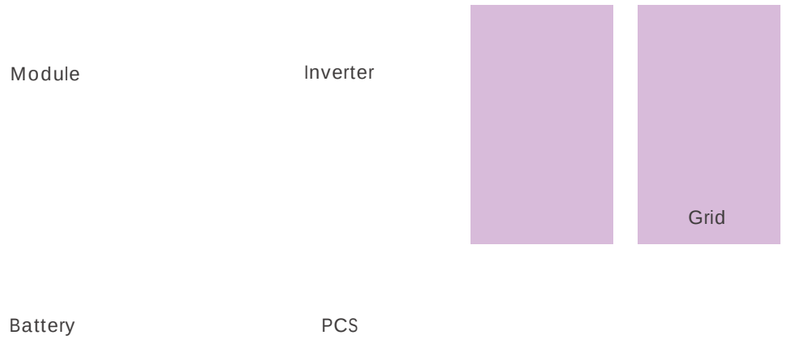
## Application

Ancillary services

Transmission and distribution services

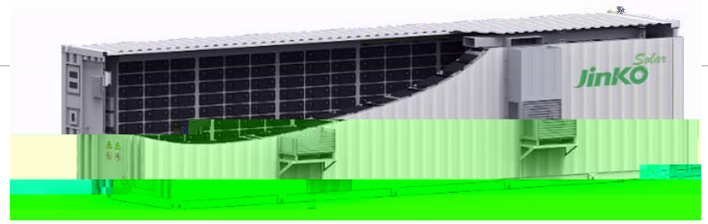
Behind-the-meter ployment energy management

Microgrid applications



## Energy Storage Container Configuration

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




| | | | |
|---|---|---|---|
| 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 80%DOD EOL 80% ,6000 25 1C 60%DOD EOL 70%<br>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

| | | | | |
|---|---|---|---|---|
| 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% | | | |
| Calender life | 10 Years | | | |
| AC Efficiency | 88% | | | |
| Protection Degree | IP54 | | | |
| 20 Foot high container | 1 | 1 | \ | \ |
| 40 Foot high container | \ | \ | 1 | 1 |