

## Features

- Modular design and wide power range in single cabinet
- Bi-directional Power Conversion System
- Built-in transformer for direct grid connection
- Grid-support functions



PWS1-50/100/150-EX



PWS1-250K-EX

## Specification

**Model** PWS1-50K-EX PWS1-100K-EX PWS1-150K-EX PWS1-250K-EX

**Utility-interactive Mode**

|                       |                                                 |       |       |       |
|-----------------------|-------------------------------------------------|-------|-------|-------|
| Battery voltage range | 500~850V                                        |       |       |       |
| DC Max Current        | 110A                                            | 220A  | 330A  | 550A  |
| AC voltage            | 400V(340V~460V)                                 |       |       |       |
| AC current            | 72A                                             | 144A  | 216A  | 360A  |
| Nominal power         | 50kW                                            | 100kW | 150kW | 250kW |
| AC frequency          | 50/60Hz(±2.5Hz)                                 |       |       |       |
| Output THDi           | ≤3%                                             | ≤3%   | ≤3%   | ≤3%   |
| AC PF                 | Listed: 0.8~1 leading or lagging (Controllable) |       |       |       |

|                                                 |                                                                                               |                |                |                     |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------|----------------|---------------------|
| Actual: 0.1~1 leading or lagging (Controllable) |                                                                                               |                |                |                     |
| Stand-alone Mode                                |                                                                                               |                |                |                     |
| Battery voltage range                           | 500~850V                                                                                      |                |                |                     |
| DC Max Current                                  | 110A                                                                                          | 220A           | 330A           | 550A                |
| AC output voltage                               | 400V(±10% configurable)                                                                       |                |                |                     |
| AC output current                               | 72A(Max 79A)                                                                                  | 144A(Max 159A) | 216A(Max 238A) | 360A(Max 397A)      |
| Nominal AC output power                         | 50kW                                                                                          | 100kW          | 150kW          | 250kW               |
| AC Max Power                                    | 55kW                                                                                          | 110kW          | 165kW          | 275kW               |
| Output THDu                                     | ≤2%                                                                                           | ≤2%            | ≤2%            | ≤2%                 |
| AC frequency                                    | 50/60Hz                                                                                       |                |                |                     |
| AC PF                                           | Listed: 0.8~1 leading or lagging (Load-depend)                                                |                |                |                     |
|                                                 | Actual: 0.1~1 leading or lagging (Load-depend)                                                |                |                |                     |
| Overload Capability                             | 105%~115%                                                                                     |                | 10min;         |                     |
|                                                 | 115%~125%                                                                                     |                | 1min;          |                     |
|                                                 | 125%~150%                                                                                     |                | 200ms          |                     |
| Physical                                        |                                                                                               |                |                |                     |
| Cooling                                         | Forced air cooling with replaceable fan module                                                |                |                |                     |
| Noise                                           | 70dB                                                                                          |                |                |                     |
| Enclosure                                       | IP20                                                                                          |                |                |                     |
| Max elevation                                   | 3000m/10000feet (> 2000m/6500feet derating)                                                   |                |                |                     |
| Operating temp.                                 | -20℃ to 50℃ (De-rating over 45℃)                                                              |                |                |                     |
| Humidity                                        | 0~95% (No condensing)                                                                         |                |                |                     |
| Size (W*H*D)                                    | 800*2160*800mm                                                                                |                |                | 1200*2160*800mm     |
|                                                 | 31.5*85*31.5 inches                                                                           |                |                | 47.2*85*31.5 inches |
| Weight                                          | 465kg                                                                                         | 680kg          | 910kg          | 1280kg              |
| Installation                                    | Vertical installation                                                                         |                |                |                     |
| Other                                           |                                                                                               |                |                |                     |
| Peak efficiency                                 | 95.50%                                                                                        | 95.80%         | 96.10%         | 96.10%              |
| CEC efficiency                                  |                                                                                               |                |                |                     |
| Protection                                      | OTP, AC OVP/UVP, OFP/UFP, EPO, AC Phase Reverse, Fan/Relay Failure, OLP, GFDI, Anti-islanding |                |                |                     |
| Configurable protection limits                  | Upper/Lower AC Voltage/Frequency limit, Battery EOD voltage.                                  |                |                |                     |
| AC connection                                   | Grid-tied:3-Phase+PE / 3-Phase+N+PE<br>Off-grid:3-Phase+N+PE                                  |                |                |                     |
| Display                                         | Touch Screen                                                                                  |                |                |                     |
| Communication                                   | RS485,CAN,Ethernet                                                                            |                |                |                     |

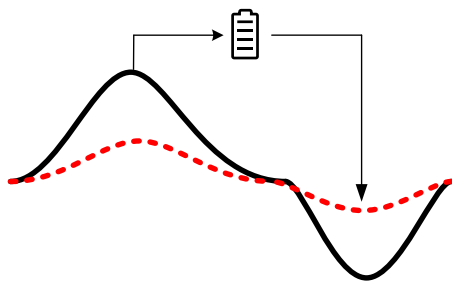
Isolation

Built-in Transformer

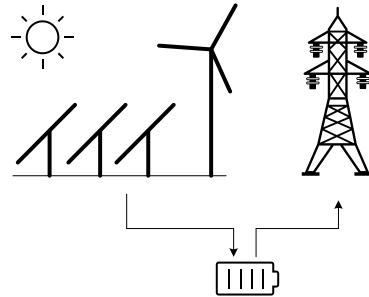
Certification and  
conformity

IEC62477, IEC61000

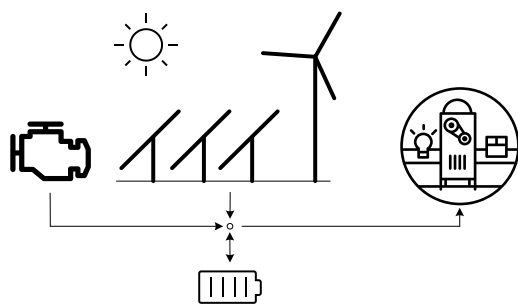
## Applications



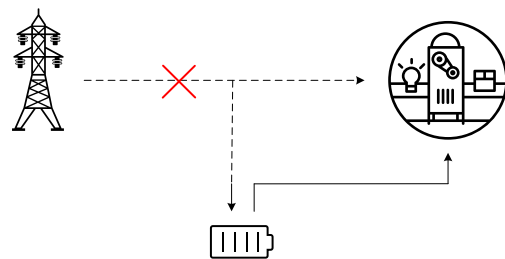
Demand Charge Management



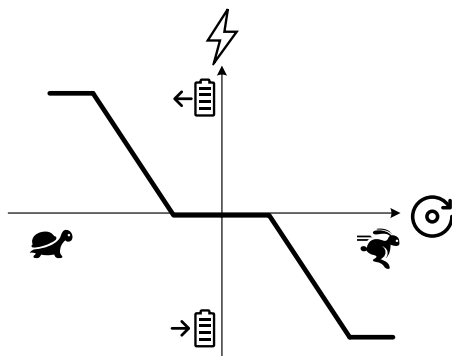
Customer Self Supply



Micro-Grid

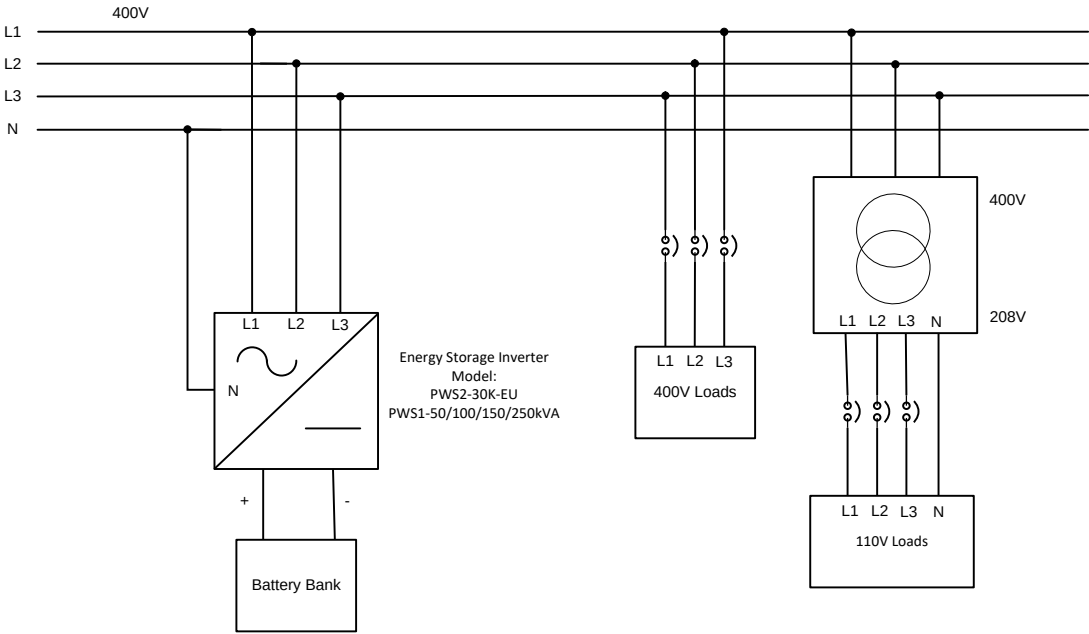


Backup power



Frequency regulation

Connection patterns



400V distribution system connection