

wondrwall



# All-In-One Battery & Inverter System



WDR-HI-060-UK  
WDR-BA-064-UK

REV 15092025

## TECHNICAL SPECIFICATION



1x WDR-HI-060-UK / 1x WDR-BA-064-UK    1x WDR-HI-060-UK / 2x WDR-BA-064-UK

### Wondrwall Inverter & Battery System

|                                |                                               |                        |
|--------------------------------|-----------------------------------------------|------------------------|
| Dimensions (W x D x H)         | 730mm x 205mm x 929mm                         | 730mm x 205mm x 1399mm |
| Net Weight                     | 95kg                                          | 154kg                  |
| <b>Specifications</b>          |                                               |                        |
| PCS                            | R-P15KEUHA1                                   | R-P16KEUHA1            |
| Modules                        | 32A                                           |                        |
| Modules                        | 1S                                            | 2S                     |
| <b>System Parameters</b>       |                                               |                        |
| Max AC Output Power            | 5kW                                           | 6kW                    |
| Max Charging/Discharging Power | 3kW                                           | 6kW                    |
| Operating Temp                 | -20°C - 55°C                                  |                        |
| Optimal Operating Temp         | 15°C - 45°C                                   |                        |
| Storage Temperature            | 7days @ -30°C - 60°C, 6 months @ -20°C - 45°C |                        |
| Operating Ambient Humidity     | 5% - 95%                                      |                        |
| Altitude                       | ≤2000m                                        |                        |
| Cooling                        | Natural cooling                               |                        |
| Communication Module           | WiFi                                          |                        |
| Communication Protocol         | RS485 & CAN                                   |                        |
| Noise Emission                 | <30dB                                         |                        |
| Standby Power Consumption      | <30W                                          |                        |
| Operating Power Consumption    | 530 mA                                        | 545 mA                 |
| Sleep Power Consumption        | 14μA                                          | 28μA                   |
| Ingress Protection rate/IP     | IP66                                          |                        |
| Mounting Options               | Wall and floor                                |                        |
| Life Expectancy                | 15 Years                                      |                        |
| Grid Type                      | 1P+N+PE                                       |                        |

# TECHNICAL SPECIFICATION

## Battery Module Parameters

|                                     |                                                                                                                                                          |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cell Type                           | LFP                                                                                                                                                      |
| Weight                              | 59.4kg ±3kg                                                                                                                                              |
| Dimensions (W x D x H)              | 730mm x 205mm x 470mm                                                                                                                                    |
| Total Capacity / Energy             | 62.4Ah / 6.39kWh                                                                                                                                         |
| Rated Capacity / Energy             | 58.87Ah / 6.04kWh                                                                                                                                        |
| Nominal Voltage                     | 102.4V                                                                                                                                                   |
| Max. Charging / Discharging Current | 52.5A (15°C ≤ T ≤ 45°C)                                                                                                                                  |
| Max. Charging / Discharging Power   | 5376W (15°C ≤ T ≤ 45°C)                                                                                                                                  |
| RTE                                 | 95%, 0.2C 25°C                                                                                                                                           |
| Cycle Life                          | ≥ 6000 cycles / 75%SOH (100%DOD, 0.5C/0.5C, 25°C)<br>≥ 4000 cycles / 80%SOH (100%DOD, 0.5C/0.5C, 25°C)                                                   |
| Self-discharge Rate                 | ≤ 2%/Month @ 25°C                                                                                                                                        |
| Output Voltage Range                | 89.6V~115.2V (15° C<T ≤ 55° C)<br>86.4V~115.2V (5° C ≤ T ≤15° C)<br>83.2V~115.2V (0°C≤T<5°C)<br>80V~115.2V (-10°C≤T<0°C)<br>76.8V~115.2V (-20°C≤T<-10°C) |

## PCS Parameters

|                        |                       |
|------------------------|-----------------------|
| Weight                 | LFP                   |
| Dimensions (W x D x H) | 730mm x 205mm x 400mm |
| Topology               | Non-isolated topology |
| Enviromental Classes   | Outdoor               |

## Battery Input Parameters

|                                                |             |              |
|------------------------------------------------|-------------|--------------|
| Max. Battery Voltage                           | 115.2V      | 230.4V       |
| Rated Battery Voltage                          | 102.4V      | 204.8V       |
| Battery Voltage Range (15°C - 55°C)            | 89.6~115.2V | 179.2~230.4V |
| Start-up Voltage                               | 85V         |              |
| Max. Continuous Charging / Discharging Current | 32A         |              |

## Grid Input Parameters

|                                      |              |       |
|--------------------------------------|--------------|-------|
| Rated Input Voltage                  | 1P+N+PE 230V |       |
| Rated Input Frequency                | 50Hz         |       |
| Max. Continuous Input Current        | 24.1A        | 28.9A |
| Max. Continuous Input Active Power   | 5000W        | 6000W |
| Max. Continuous Input Apparent Power | 5000W        | 6000W |

## TECHNICAL SPECIFICATION

### PV Input Parameters

|                                       |           |             |
|---------------------------------------|-----------|-------------|
| Max. Recommended DC Power             | 8000W     | 9000W       |
| Max. DC Voltage                       | 550 V     | 550 V       |
| Nominal DC Operating Voltage          | 267 V     | 300 V       |
| Max. Input Current (Per MPPT)         | 15A       | 15A         |
| Max. Short Circuit Current (Per MPPT) | 19A       | 19A         |
| MPPT DC Voltage Range                 | 100-500 V | 100-500 V   |
| MPPT DC Voltage Range (Full Load)     | 267-460 V | 300 - 460 V |
| Start-up Voltage                      | 85 V      | 85 V        |
| No. of MPPT Trackers                  | 2         | 2           |
| Strings per MPPT Tracker              | 1         | 1           |

### On-Grid Output Parameters

|                                                  |                            |         |
|--------------------------------------------------|----------------------------|---------|
| Nominal AC Power                                 | 5000 W                     | 6000 W  |
| Max. Apparent AC Power                           | 5000 VA                    | 6000 VA |
| Rated Grid Voltage (AC Voltage Range)            | 1P+N+PE 230V               |         |
| Rated Grid Frequency [Hz]                        | 50 Hz                      |         |
| Nominal AC Current [A]                           | 21.7 A                     | 26 A    |
| Max. AC Current [A]                              | 24.1 A                     | 28.9 A  |
| Displacement Power Factor                        | 0.8 leading to 0.8 lagging |         |
| Total Harmonic Distortion (THDi, @ rated output) | 3%                         |         |
| AC Connection                                    | Single Phase               |         |

### Backup

|                           |        |        |
|---------------------------|--------|--------|
| Max. Output Power         | 5000 W | 6000 W |
| Rated AC Output Voltage   | 230 V  |        |
| Rated AC Output Frequency | 50 Hz  |        |

### Protection

|                                       |            |  |
|---------------------------------------|------------|--|
| Protection level                      | Class I    |  |
| String Current Monitoring             | Integrated |  |
| Output Overcurrent Protection         | Integrated |  |
| Input Reverse Connection Protection   | Integrated |  |
| Battery Reverse Connection Protection | Integrated |  |
| Anti-Islanding Protection             | Integrated |  |
| AC Overcurrent Protection             | Integrated |  |
| AC Short Circuit Protection           | Integrated |  |
| AC Overvoltage Protection             | Integrated |  |

# TECHNICAL SPECIFICATION

|                               |                                                                                                                       |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| DC Switch                     | Integrated                                                                                                            |
| DC Surge Protection           | Integrated                                                                                                            |
| AC Surge Protection           | Integrated                                                                                                            |
| DC arc fault protection       | Integrated                                                                                                            |
| <b>Certificate</b>            |                                                                                                                       |
| Cell Certification            | UL1973, IEC62619, UN38.3, Battery Directive                                                                           |
| Grid Connection Certification | NTS, UNE217002:2020, UNE217001:2020, CEIO-21:2022, EN50549+NCRFG, TYPE A                                              |
| Safety/EMC Certification      | UN38.3+Test summary+ Sea-Land transportation identification report+ Danger report+ MSDS, IEC62619, IEC62109, IEC61000 |
| Environmental Certification   | ROHS, REACH                                                                                                           |