



## LP Range IP65



## DATASHEET

SM3.6kWLLL65/SM3.6kWPLL65  
SM6.0kWLLL65/SM6.0kWPLL65  
SM7.2kWLLL65/SM7.2kWPLL65  
SM8.0kWLLL65/SM8.0kWPLL65  
SM10.0kWLLL65/SM10.0kWPLL65  
SM12.0kWLLL65/SM12.0kWPLL65

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v.11 (28/01/26)

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## Product Parameters

### Note

Specifications, approvals and certification are subject to change without prior notice. Please confirm the current status with Sunsynk before placing an order.

| Model   | SM(X.X)kWLL65 / SM(X.X)kWPLL65             |                                    |                                    |                                    |                                    |         |
|---|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------|
|   | 3.6  | 6.0                                | 7.2                                | 8.0                                | 10.0                               | 12.0    |
| <b>Battery Input Parameters</b>                               |  |                                    |                                    |                                    |                                    |         |
| Supported Battery Type  | LiFePO4 or Lead-Acid                       |                                    |                                    |                                    |                                    |         |
| Battery Input Voltage Range                                   | 40~60V                                     |                                    |                                    |                                    |                                    |         |
| Max. Charge Voltage   | 60V (Configurable)                         |                                    |                                    |                                    |                                    |         |
| Max. Charge Current (Configurable)                            | 60A  | 120A                               | 135A                               | 150A                               | 180A                               | 220A    |
| Max. Discharge Current (Configurable)                         | 80A  | 130A                               | 165A                               | 180A                               | 220A                               | 260A    |
| Battery Capacity (Recommended)                                | 100~2000Ah                                 |                                    |                                    |                                    |                                    |         |
| Charge for LiFePO4 Battery Pack                               | Communicating with BMS of the Battery Pack |                                    |                                    |                                    |                                    |         |
| <b>PV String Input Parameters</b>                             |  |                                    |                                    |                                    |                                    |         |
| Max. DC Input Power   | 7200W                                      | 9000W                              | 10000W                             | 12000W                             | 15000W                             | 18000W  |
| DC Input Voltage  | 500V                                       |                                    |                                    |                                    |                                    |         |
| MPPT Voltage Range  | 120~450V                                   |                                    |                                    |                                    |                                    |         |
| Start-Up Voltage  | 150V                                       |                                    |                                    |                                    |                                    |         |
| Max. Input Current  | 15A x 2 = 30A<br>(2 MPPT Channels)         | 18A x 2 = 36A<br>(2 MPPT Channels) | 23A x 2 = 46A<br>(2 MPPT Channels) | 28A x 2 = 56A<br>(2 MPPT Channels) | 30A x 2 = 60A<br>(2 MPPT Channels) |         |
| <b>AC Output Parameters (Back-Up)(Feed to Essential Load)</b> |  |                                    |                                    |                                    |                                    |         |
| Max. Output Power   | 3600W                                      | 6000W                              | 7200W                              | 8000W                              | 10000W                             | 12000W  |
| Max. Output Apparent Power                                    | 3600VA                                     | 6000VA                             | 7200VA                             | 8000VA                             | 10000VA                            | 12000VA |
| Peak Output Apparent Power                                    | 7200VA                                     | 12000VA                            | 14400VA                            | 16000VA                            | 20000VA                            | 24000VA |
| Max. Output Current   | 16A  | 27A                                | 33A                                | 36A                                | 45A                                | 55A     |
| Nominal Output Voltage  | 220/230/240Vac Single-Phase (Configurable) |                                    |                                    |                                    |                                    |         |
| Nominal Output Frequency                                      | 50/60Hz (+/-0.2%) (Configurable)           |                                    |                                    |                                    |                                    |         |
| Max. Bypass Current   | 40A  |                                    | 42A                                |                                    | 63A                                |         |
| Shift Time (Bypass and Inverter)                              | 10ms                                       |                                    |                                    |                                    |                                    |         |
| Output THDv (Resistor Load)                                   | <3%  |                                    |                                    |                                    |                                    |         |

| Model  | SM(X.X)kWLLL65 / SM(X.X)kWPLL65  |               |               |        |               |         |
|--|--|---------------|---------------|--------|---------------|---------|
|  | 3.6  | 6.0           | 7.2           | 8.0    | 10.0          | 12.0    |
| <b>AC Input Parameter</b> (On-Grid)(Bypass to Essential Load & Charge the Battery/Feed to Home Load) |  |               |               |        |               |         |
| Max. Input Power (Bypass to Essential Load/Charge the Battery)                                       | 3600W  | 6000W         | 7200W         | 8000W  | 10000W        | 12000W  |
| Max. Output Power (Feed to Home Load)  | 3600W  | 6000W         | 7200W         | 8000W  | 10000W        | 12000W  |
| Max. Apparent Input Power (Bypass to Essential Load/Charge the Battery)                              | 3600VA   | 6000VA        | 7200VA        | 8000VA | 10000VA       | 12000VA |
| Max. Apparent Output Power (Feed to Home Load)   | 3600VA   | 6000VA        | 7200VA        | 8000VA | 10000VA       | 12000VA |
| Nominal Input/Output Voltage   | 220/230/240Vac Single-Phase (Auto Adjusted to Fit Home Grid)   |               |               |        |               |         |
| Nominal Input/Output Frequency   | 50/60Hz (Auto Adjusted to Fit Home Grid)   |               |               |        |               |         |
| Max. Bypass Current  | 40A  |               | 42A           |        | 63A           |         |
| Shift Time (Bypass and Inverter)   | 10ms   |               |               |        |               |         |
| <b>Efficiency</b>  |  |               |               |        |               |         |
| Max. Efficiency  | 97.6%  |               |               |        |               |         |
| Max. Battery to Load Efficiency  | 94.0%  |               |               |        |               |         |
| Europe Efficiency  | 97.6%  |               |               |        |               |         |
| MPPT Efficiency  | 99.9%  |               |               |        |               |         |
| <b>Protection</b>  |  |               |               |        |               |         |
| Integrated   | Battery Over-Charge Protection, Battery Low-Voltage Protection, Over-Temperature Protection, Output Overload Protection, Output Short Circuit Protection, Output Over-Voltage Protection |               |               |        |               |         |
| <b>Compliances</b>   |  |               |               |        |               |         |
| Grid Regulation  | Approvals and certifications are subject to change without prior notice. Please confirm the current status with Sunsynk before placing an order.   |               |               |        |               |         |
| EMC/Safety Regulation  |  |               |               |        |               |         |
| <b>General Information</b>   |  |               |               |        |               |         |
| Operating Temperature Range  | -20°C ~ +50°C (>35°C Derating)   |               |               |        |               |         |
| Protection Degree  | IP65   |               |               |        |               |         |
| Dimension  | 450x435x230mm  | 500x484x228mm | 550x535x235mm |        | 620x585x255mm |         |
| Weight   | 22kg   | 26.5kg        | 27kg          |        | 36kg          |         |



## Contact Us

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