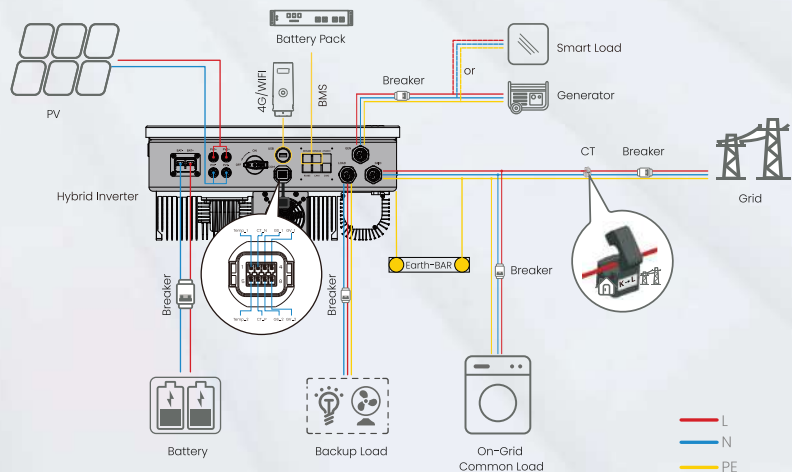


# SM-SOLON-IP65-6KW

Single-Phase IP65 Hybrid Solar Inverter

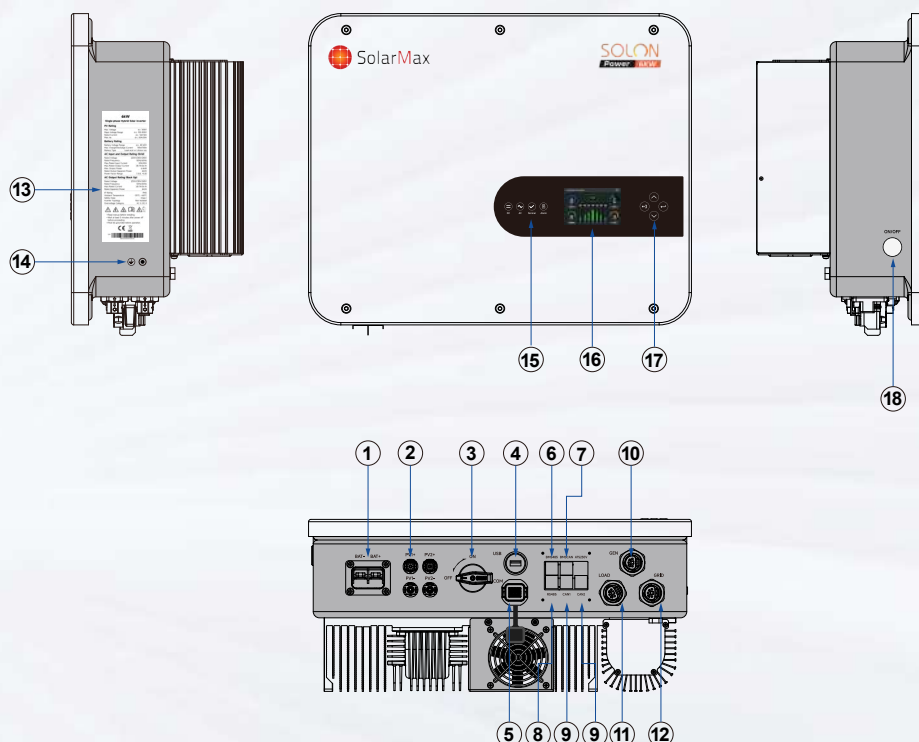


**6 YEARS WARRANTY**

**3 Years Unlimited Parts Replacement  
& 3 Years Service Warranty.**

\*Terms & Conditions Apply

## Product Overview



| SN. | Part Name                   | Description                                                                                             |
|-----|-----------------------------|---------------------------------------------------------------------------------------------------------|
| 1   | Battery Wiring Port         | For battery connection.                                                                                 |
| 2   | DC Input Terminals          | 2-channel photovoltaic connector.                                                                       |
| 3   | DC Switch                   | For controlling the shutdown of DC input.                                                               |
| 4   | USB Interface               | For the WiFi/4G collector monitoring.                                                                   |
| 5   | COM Interface               | Battery temperature sampling, external CT connection, diesel generator start or stop control interface. |
| 6   | BMS 485 Interface           | BMS lithium battery RS485 communication.                                                                |
| 7   | BMS CAN Interface           | BMS lithium battery CAN communication.                                                                  |
| 8   | RS485 Interface             | For ammeter communication.                                                                              |
| 9   | CAN1 & CAN2 Interface       | Multi-device parallel communication.                                                                    |
| 10  | GEN                         | For the diesel generator Or Smart Load                                                                  |
| 11  | LOAD                        | For important load wiring.                                                                              |
| 12  | GRID                        | For power grid wiring.                                                                                  |
| 13  | Labels                      | Including nameplate, warning label, and QR code.                                                        |
| 14  | External Grounding Terminal | For reliable grounding of inverters.                                                                    |
| 15  | LED Indicator               | For indicating the current inverter status.                                                             |
| 16  | LCD Screen                  | For indicating the current operating information and touch control of the inverter.                     |
| 17  | Function button             | For manual control.                                                                                     |
| 18  | On/Off Button               | For Manual Control                                                                                      |

| Model                          | SM-SOLON-IP65-6KW |
|--------------------------------|-------------------|
| <b>PV(DC)</b>                  |                   |
| Recommended Max PV Input Power | 9200 Wp           |
| Max Input Voltage              | 500 V             |
| Start-up Voltage               | 125 V             |
| Rated Input Voltage            | 370 V             |
| MPPT Input Voltage Range       | 125-500 V         |
| MPPT Max. Input Current        | 18 A              |
| MPPT Short-Circuit Current     | 20 A              |
| No. of MPPT                    | 2                 |
| No. of Strings per MPPT        | 1                 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Grid(AC)</b>                      |                            |
| Max. Input Apparent Power            | 6000 W                     |
| Rated Output Power                   | 6000 W                     |
| Max. Output Apparent Power           | 6600 VA                    |
| Rated AC Voltage                     | L/N/PE, 220 / 230 240 V    |
| Input/Output Voltage Range           | 180-300 V                  |
| Rated Output Voltage Frequency       | 50/60Hz                    |
| Input/Output Voltage Frequency Range | (45-5) / (55-65) Hz        |
| Rated Output Current                 | 26.1 A                     |
| Max. Input/Output Current            | 28.7 A                     |
| Power Factor ( Rated )               | > 0.99                     |
| Power Factor (Adjustable)            | 0.8 Leading... 0.8 Lagging |
| Total Harmonic Distortion            | <3% (Rated Power)          |
| Grid Connection Mode                 | L/N/PE                     |

|                                  |                           |
|----------------------------------|---------------------------|
| <b>AC Load Output (Off-Grid)</b> |                           |
| Rated Output Power               | 6600 W                    |
| Max. Output Apparent Power       | 6600 W                    |
| Rated Output Voltage             | L/N/PE, 220 / 230 / 240 V |
| Output Voltage Range             | 200-240 V                 |
| Rated Output Frequency           | 50/60Hz                   |
| Rated Output Current             | 26.1 A                    |
| Max. Output Current              | 28.7 A                    |
| Total Harmonic Distortion        | <3% (R Load )             |
| On-grid/Off-grid Switching Time  | <10 ms                    |

| Model                         | SM-SOLON-IP65-6KW |
|-------------------------------|-------------------|
| <b>Battery (DC)</b>           |                   |
| Rated Output Power            | 6000 W            |
| Max. Charge/Discharge Power   | 6000 W            |
| Rated Voltage                 | 48 VDC            |
| Battery Voltage Range         | 40-60 VDC         |
| Max. Charge/Discharge Current | 135 A             |
| Communication Port            | CAN/RS485         |

|                      |       |
|----------------------|-------|
| <b>Efficiency</b>    |       |
| Max. Efficiency      | 97.6% |
| Max. MPPT Efficiency | 99.9% |
| Max. Euro Efficiency | 96.5% |

|                       |                                                                                                                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Protection</b>     |                                                                                                                                                                                                                                                   |
| Integrated Protection | Anti-flow Protection, DC Reverse Protection, DC Circuit Breaker, Insulation Resistor Detection, GFC Leakage Current Monitoring, Anti-islanding Protection, Residual Current Monitoring, Reverse Polarity Protection, Off-grid Overload Protection |
| Surge Protection      | DC Type, II, AC Type II                                                                                                                                                                                                                           |

|                                  |                                            |
|----------------------------------|--------------------------------------------|
| <b>Display and Communication</b> |                                            |
| Display                          | LCD+LED+APP                                |
| Communication                    | RS485, 4G(Optional), Wifi(Dongle Included) |

|                             |                |
|-----------------------------|----------------|
| <b>General Data</b>         |                |
| Dimensions (WxHxD)          | 580x330x232 mm |
| Weight                      | 20.5kg         |
| Operating Temperature Range | -25 ~ 60 °C    |
| Noise                       | <35 dB         |
| Cooling                     | Smart Cooling  |
| Installation Style          | Wall-mounted   |
| Protection Rating           | IP65           |
| Warranty                    | 6 Years        |

|                             |                                                                                                                |
|-----------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Standards Compliance</b> |                                                                                                                |
| Grid Connection             | IEC 62116, IEC 61727, NRS 097-2-1, EN 50549, EN 50438, C10/11, CE 0-21, AS 4777.2, UNE 206006/206007, VDE 4105 |
| Safety Regulation           | EN/IEC 62109-1/2                                                                                               |
| Others                      | EN/IEC 61000-6-1/3, IEC 60068, IEC 61683                                                                       |