


# SOLAR INVERTER CATALOG

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INVT Solar Technology (Shenzhen) Co., Ltd.

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# COMPANY PROFILE

## ABOUT US

INVT (Shenzhen INVT Electric Co.,Ltd) was established in 2002, and is the first A-share listed company (Stock code: SZ 002334) in Shenzhen Stock Exchange in the industry. Business covering industry automation, electric vehicle, network power and rail transit. INVT owns 15 subsidiaries and more than 3800 employees.

INVT Solar (INVT Solar Technology (Shenzhen) Co.,Ltd.), is a professional solar inverters manufacturer and national high-tech enterprise. Founded in 2015, it is a wholly-owned subsidiary of INVT. Main offering PV inverter solutions and energy storage systems for commercial & industrial, and residential applications. Relying on INVT' s strong 20-year of operating strength, INVT Solar has great advantages in R&D, production, sales and service, can provide all-round support to customers. Now the company inverters power installations in over 80 countries. Low-Carbon Age, INVT Solar is committed to providing smart products and services to develop clean energy.

## CORE INDUSTRY BASE

### Shenzhen Guangming Scientific Industrial Park

The headquarter and incubator of new products and business R&D.

### Shenzhen Fuyong Industrial Park

Core industry base and manufacturing center in South China.

### Suzhou Industrial Park

Core industry base and R&D center in East China.



## R&D INNOVATION

INVT regards research and development innovation as vitality of the company. In order to make the products and solutions of INVT more and more perfect, INVT builds the core competitiveness of the company and creates value for customers and society through strategic implementation such as independent innovation, operational excellence management and human resource development.

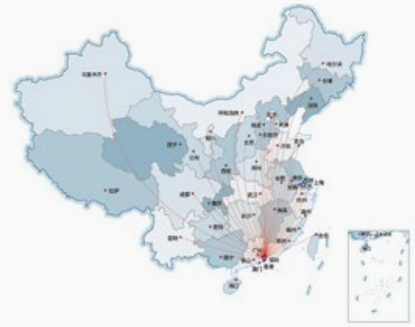
- 11%+ R&D Investment/ Revenue
- 35%+ R&D Staff
- 1300+ Patents
- 20 Years Technical Accumulation
- 11 R&D Centers

## MARKETING & SERVICE NETWORK

INVT global sales team provides customers with professional and efficient pre-sale, in sale and after-sale services, and enhances the added value of the brand with high-quality services.

Email: solar@invt.com.cn

Global Network



## INVT Milestone

**2002**
·Founded
·1 st gen. of VFDs launched

**2005**
·Vector VFDs launched

**2006**
·Started to explore overseas markest

**2009**
·Awarded as national Key High-tech Enterprise

**2010**
·Listed on Shenzhen stock market(002334)
·India subsidiary established
·Stepped into UPS and rail transit business

**2011**
·Annual sales over $100 million
·Set out to explore the business in servo, PLC and power sectors

**2014**
·Suzhou Industrial Park Phase I came into service
·Stepped into electric vehicle business

**2017**
·Won transportation system project for Shenzhen metro
·Won the"Chinese Outstanding Patented Invention"award
·Annual sales over $300 million

**2018**
·Guangming headquarter came into service
·No. 1 market share in Vietnam

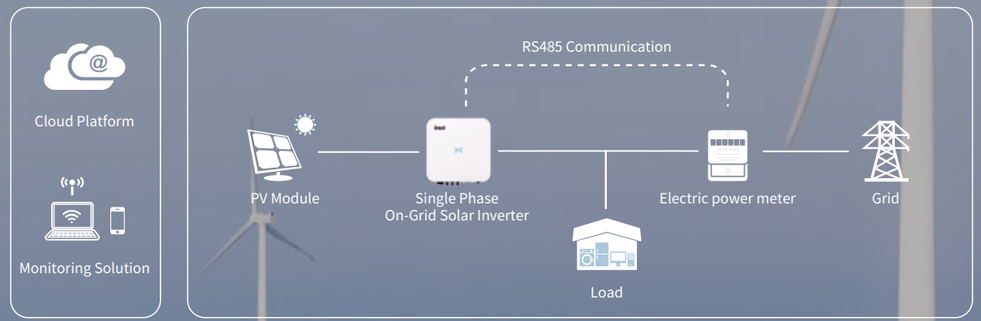
**2020**
·Won the"National Science and Technology Major Project of the Ministry of Science and Technology of China award

**2021**
·IABG Founded;LTC process transformation
·EV Drive subsidiary merged with EV Charging Subsidiary

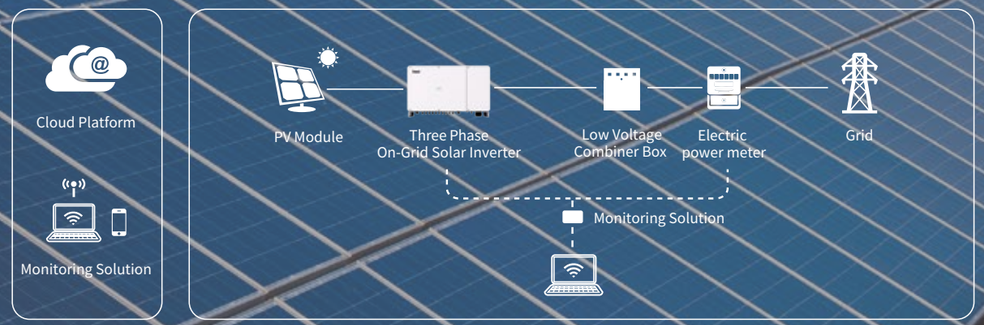
**2022**
·Strategic Planning Process transformation

# On-Grid PV Solution

## Residential On-grid PV Solution




## Commercial PV Solution



# MG1-3kW

## Single Phase On-Grid Solar Inverter


### Efficient
### Higher revenue

- Wide voltage range and low start-up voltage
- External inductor to reduce inverter heat

### Intelligent
### Simple O&M

- Smart grid adaptive to meet different grid-connection requirements
- Export control (Zero export)
- Remote monitoring and operation via PC or mobile phones

### Reliable
### Worry free

- IP65 Protection degree: support outdoor installation
- Aluminum casing, natural cooling

| | MG1KTL | MG1K5TL | MG2KTL | MG3KTL |
|---|---|---|---|---|
| **Input (DC)** | | | | |
| Max. Input Power | 1.2kW | 1.7kW | 2.2kW | 3.3kW |
| Max. Input Voltage | 450V | | | 500V |
| Start Voltage / Min. Operating Voltage | 80V / 60V | | | |
| MPPT Voltage Range | 60V ~ 400V | 80V ~ 410V | 100V ~ 410V | 120V ~ 450V |
| MPPT Rated Voltage | 360V | | | |
| Number of MPP Trackers / String per MPPT | 1 / 1 | | | |
| Max. Current per MPPT | 9A | 10A | 12A | 15A |
| **Output (AC)** | | | | |
| Max. Output Current | 4.5A | 6.5A | 9A | 13A |
| Rated AC Power | 1kW | 1.5kW | 2kW | 3kW |
| Rated Grid Frequency | 50Hz / 60Hz | | | |
| Rated Grid Voltage | 230V, L+N+PE | | | |
| Power Factor | ⩾ 0.99 (Rated Power) | | | |
| THDi | ＜ 3% (Rated Power) | | | |
| **Efficiency** | | | | |
| Max. Efficiency | 96.90% | 97.20% | 97.20% | 97.30% |
| European Efficiency | 96.00% | 96.10% | 96.10% | 96.50% |
| MPPT Efficiency | 99.90% | | | |
| **Protection** | | | | |
| Protection | DC switch, AC short circuit protection, AC over current protection, Input over voltage protection, Isolation protection, Surge protection, Anti-islanding protection, Over temperature protection, Grouding fault monitoring, etc. | | | |
| **Communication** | | | | |
| Display | LED (Optional) / LCD (Standard) | | | |
| System Language | English / Chinese / German / Dutch | | | |
| Communication | Standard: RS485<br>Optional: WiFi / GPRS / Ethernet | | | |
| **Standard Compliance** | | | | |
| Grid Connection Standards | IEC 61727:2004, IEC62116:2014, IEC 60068-2-1:2007, IEC 60068-2-2:2007, IEC 60068-2-14:2009, IEC 60068-2-30:2005, IEC 61683:1999, DIN VDE 0126-1-1:2013, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018, G98:2019, C10/11:2019, AS/NZS 4777.2:2020, NB/T 32004-2018, PEA, ZVR | | | |
| Safety / EMC | IEC/EN 62109-1:2010, IEC/EN 62109-2:2011, EN 61000-6-2:2019, EN 61000-6-3:2007/A1:2011 | | | |
| **General Data** | | | | |
| Dimensions (W x H x D) | 300 x 280 x 138 mm | | | |
| Weight | 9.5kg | | | |
| Operating Temperature Range | -25°C ~ +60°C (Derating above 45°C ) | | | |
| Cooling Method | Natural Cooling | | | |
| Protection Degree | IP65 | | | |
| Noise | ＜ 30dB | | | |
| Max. Operating Altitude | 3000m (Derating above 2000m) | | | |
| Relative Humidity | 0~100% | | | |
| Topology | Transformerless | | | |
| Night Power Consumption | <1W | | | |

# MG4-5kW

## Single Phase On-Grid Solar Inverter


### Efficient
### Higher revenue

- Wide voltage range and low startup voltage
- External inductor to reduce internal temperature

### Intelligent
### Simple O&M

- Smart grid adaptive to meet different grid-connection requirements
- Export control (Zero export)
- Remote monitoring and operation via PC or mobile phones

### Reliable
### Worry free

- IP65 Protection degree: support outdoor installation
- Aluminum casing, natural cooling

| | MG4KTL | MG4K6TL | MG5KTL |
|---|---|---|---|
| **Input (DC)** | | | |
| Max. Input Power | 4.8kW | 5.52kW | 6kW |
| Max. Input Voltage | | 600V | |
| Start Voltage / Min. Operating Voltage | | 120V / 100V | |
| MPPT Voltage Range | | 120V ~ 550V | |
| MPPT Rated Voltage | | 360V | |
| Number of MPP Trackers / String per MPPT | | 1 / 2 | |
| Max. Current per MPPT | 16A | 18A | 20A |
| **Output (AC)** | | | |
| Max. Output Current | 16A | 18.3A | 20A |
| Rated AC Power | 3.68kW | 4.2kW | 4.6kW |
| Rated Grid Frequency | | 50Hz / 60Hz | |
| Rated Grid Voltage | | 230V, L+N+PE | |
| Power Factor | | ⩾ 0.99 (Rated power) | |
| THDi | | < 3% (Rated power) | |
| **Efficiency** | | | |
| Max. Efficiency | 97.70% | 97.70% | 97.80% |
| European Efficiency | 96.70% | 96.70% | 96.80% |
| MPPT Efficiency | | 99.90% | |
| **Protection** | | | |
| Protection | DC breaker, AC Short-circuit protection, Over current protection, Over voltage protection, Isolation protection, RCD, Surge Protection, Anti-islanding protection, Over-temperature protection, Ground fault monitoring, etc. | | |
| **Communication** | | | |
| Display | LED (Optional) / LCD (Standard) | | |
| System Language | English / Chinese / German / Dutch | | |
| Communication | Standard: RS485<br>Optional: WiFi / GPRS / Ethernet | | |
| **Standard Compliance** | | | |
| Grid Connection Standards | IEC 61727:2004, IEC62116:2014, IEC 60068-2-1:2007, IEC 60068-2-2:2007, IEC 60068-2-14:2009, IEC 60068-2-30:2005, IEC 61683:1999, DIN VDE 0126-1-1:2013, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018, G98:2019, C10/11:2019, AS/NZS 4777.2:2020, NB/T 32004-2018, PEA, ZVR | | |
| Safety / EMC | IEC/EN 62109-1:2010, IEC/EN 62109-2:2011, EN 61000-6-2:2019, EN 61000-6-3:2007/A1:2011 | | |
| **General Data** | | | |
| Dimensions (W x H x D) | 360 × 405 × 150 mm | | |
| Weight | 16kg | | |
| Operating Temperature Range | -25°C ~ +60°C (Derating above 45°C ) | | |
| Cooling Method | Natural Cooling | | |
| Protection Degree | IP65 | | |
| Noise | < 30dB | | |
| Max. Operating Altitude | 3000m (Derating above 2000m) | | |
| Relative Humidity | 0~100% | | |
| Topology | Transformerless | | |
| Night Power Consumption | < 1W | | |

# MG3-6kW-2M

## Single Phase On-Grid Solar Inverter


### Efficient
### Higher revenue

- Wide voltage range, low startup voltage, Higher conversion efficiency
- External inductor to reduce internal temperature

### Intelligent
### Simple O&M

- Smart grid adaptive to meet different grid-connection requirements
- Export control (Zero export)
- Remote monitoring and operation via PC or mobile phones

### Reliable
### Worry free

- IP65 Protection degree: support outdoor installation
- Aluminum casing, natural cooling

| | MG3KTL-2M | MG4KTL-2M | MG4K6TL-2M | MG5KTL-2M | MG6KTL-2M |
|---|---|---|---|---|---|
| **Input (DC)** | | | | | |
| Max. Input Power | 3.6kW | 4.8kW | 5.52kW | 6kW | 6.3kW |
| Max. Input Voltage | 600V | | | | |
| Start Voltage / Min. Operating Voltage | 120V / 100V | | | | |
| MPPT Voltage Range | 120V-550V | | | | |
| MPPT Rated Voltage | 360V | | | | |
| Number of MPP Trackers / String per MPPT | 2/1 | | | | |
| Max. Current per MPPT | 8A | 10A | 11A | 12A | 16A |
| **Output (AC)** | | | | | |
| Max. Output Current | 14A | 16A | 18.3A | 20A | 27.3A |
| Rated AC Power | 3kW | 3.68kW | 4.2kW | 4.6kW | 6kW |
| Rated Grid Frequency | 50Hz / 60Hz | | | | |
| Rated Grid Voltage | 230V, L+N+PE | | | | |
| Power Factor | ⩾ 0.99 (Rated Power) | | | | |
| THDi | ＜ 3% (Rated Power) | | | | |
| **Efficiency** | | | | | |
| Max. Efficiency | 97.70% | 97.70% | 97.70% | 97.80% | 97.80% |
| European Efficiency | 96.70% | 96.70% | 96.70% | 96.80% | 96.80% |
| MPPT Efficiency | 99.90% | | | | |
| **Protection** | | | | | |
| Protection | DC switch, AC short-circuit protection, Over current protection, Over voltage protection, Isolation protection, RCD, Surge protection, Anti-islanding protection, Over-temperature protection, Ground fault monitoring, etc. | | | | |
| **Communication** | | | | | |
| Display | LED (Optional) / LCD (Standard) | | | | |
| System Language | English / Chinese / German / Dutch | | | | |
| Communication | Standard: RS485<br>Optional: WiFi / GPRS / Ethernet | | | | |
| **Standard Compliance** | | | | | |
| Grid Connection Standards | IEC 61727:2004, IEC62116:2014, IEC 60068-2-1:2007, IEC 60068-2-2:2007, IEC 60068-2-14:2009, IEC 60068-2-30:2005, IEC 61683:1999, DIN VDE 0126-1-1:2013, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018, G98:2019, C10/11:2019, AS/NZS 4777.2:2020, NB/T 32004-2018, PEA, ZVR | | | | |
| Safety / EMC | IEC/EN 62109-1:2010, IEC/EN 62109-2:2011, EN 61000-6-2:2019, EN 61000-6-3:2007/A1:2011 | | | | |
| **General Data** | | | | | |
| Dimensions (W x H x D) | 360 x 462 x 150 mm | | | | |
| Weight | 18kg | | | | |
| Operating Temperature Range | -25°C ~ +60°C (Derating above 45°C ) | | | | |
| Cooling Method | Natural Cooling | | | | |
| Protection Degree | IP65 | | | | |
| Noise | ＜ 30dB | | | | |
| Highest Altitude | 3000m (Derating above 2000m) | | | | |
| Relative Humidity | 0~95% | | | | |
| Topology | Transformerless | | | | |
| Night Power Consumption | <1W | | | | |

# XG3-10kW

## Single Phase On-Grid Solar Inverter


### Efficient
### Higher revenue

- 2 MPP Trackers , Max. input current per string: 18A
- 150% DC Input Oversizing
- Compatible with high power modules

### Intelligent
### Simple O&M

- Smart I-V Curve Diagnosis Function:  locate PV string faults accurately and automaticallydetect faults
- Intelligent Fault Detection: ac-side voltage and current waveforms real-time recorded, fast fault location
- Support RS485/WiFi/4G: remote monitoring and operation via PC or mobile phones

### Reliable
### Worry free

- IP66 Protection Degree: support outdoor installation
- DC & AC Type II SPD: prevent lightning damage
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation

| | XG3KTL-1M | XG3KTL | XG3K6TL | XG4KTL | XG4K2TL | XG4K6TL | XG5KTL | XG6KTL | XG7KTL | XG8KTL | XG9KTL | XG10KTL | XG7KTL1 | XG8KTL1 | XG9KTL1 | XG10KTL1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Input (DC)** | | | | | | | | | | | | | | | | |
| Max. Input Power | 4.5kW | 4.5kW | 5.52kW | 6kW | 6.3kW | 6.9kW | 7.5kW | 9kW | 10.5kW | 12kW | 13.5kW | 15kW | 10.5kW | 12kW | 13.5kW | 15kW |
| Max. Input Voltage | 600V | | | | | | | | | | | | | | | |
| Start Voltage | 80V | | | | | | | | | | | | | | | |
| Rated Input Voltage | 360V | | | | | | | | | | | | | | | |
| Full-load MPP Voltage Range | 190V ~ 480V | 120V ~ 480V | 135V ~ 480V | 145V ~ 480V | 150V ~ 480V | 160V ~ 480V | 170V ~ 480V | 190V ~ 480V | 230V ~ 480V | 250V ~ 480V | 270V ~ 480V | 290V ~ 480V | 230V ~ 480V | 250V ~ 480V | 270V ~ 480V | 290V ~ 480V |
| MPPT Voltage Range | 80V ~ 560V | | | | | | | | | | | | | | | |
| Number of MPP Trackers | 1 | 2 | | | | | | | | | | | | | | |
| Number of String per MPPT | 1 | 1/1 | | | | | | | | | | | 1/2 | | | |
| Max. Current per MPPT | 20A | | | | | | | | | | | | 15A / 25A | | | |
| Max. Short Circuit Current per MPPT | 25A | | | | | | | | | | | | 18A / 30A | | | |
| **Output (AC)** | | | | | | | | | | | | | | | | |
| Max. Output Current | 15A | | 16A | 20A | 21A | 23A | 25A | 27.3A | 31.8A | 36.4A | 41A | 45.5A | 31.8A | 36.4A | 41A | 45.5A |
| Rated Output Power | 3kW | | 3.68kW | 4kW | 4.2kW | 4.6kW | 5kW | 6kW | 7kW | 8kW | 9kW | 10kW | 7kW | 8kW | 9kW | 10kW |
| Max. Output Power | 3.3kVA | | 3.68kVA | 4.4kVA | 4.62kVA | 5kVA | 5.5kVA | 6kVA | 7kVA | 8kVA | 9kVA | 10kVA | 7kVA | 8kVA | 9kVA | 10kVA |
| Rated Grid Frequency | 50Hz / 60Hz | | | | | | | | | | | | | | | |
| Rated Grid Voltage | 220Vac / 230Vac / 240Vac | | | | | | | | | | | | | | | |
| Power Factor | >0.99 (0.8 leading~0.8 lagging) | | | | | | | | | | | | | | | |
| THDi | <3% (Rated Power) | | | | | | | | | | | | | | | |
| **Efficiency** | | | | | | | | | | | | | | | | |
| Max. Efficiency | 98.10% | | | 98.30% | | | | | 98.10% | | | | | | | |
| European Efficiency | 97.10% | | | 97.20% | | | | | 97.10% | | | | | | | |
| MPPT Efficiency | 99.90% | | | | | | | | | | | | | | | |
| **Protection** | | | | | | | | | | | | | | | | |
| DC reverse polarity protection | Yes | | | | | | | | | | | | | | | |
| Anti-islanding protection | Yes | | | | | | | | | | | | | | | |
| AC short circuit protection | Yes | | | | | | | | | | | | | | | |
| Residual current monitoring unit | Yes | | | | | | | | | | | | | | | |
| Insulation resistance monitoring | Yes | | | | | | | | | | | | | | | |
| Ground fault monitoring | Yes | | | | | | | | | | | | | | | |
| Grid monitoring | Yes | | | | | | | | | | | | | | | |
| PV string monitoring | Yes | | | | | | | | | | | | | | | |
| Surge protection | Type II | | | | | | | | | | | | | | | |
| AFCI protection | Optional | | | | | | | | | | | | | | | |
| **Communication** | | | | | | | | | | | | | | | | |
| Display | LED / LCD / WiFi+App | | | | | | | | | | | | | | | |
| Communication | RS485 / WiFi / 4G | | | | | | | | | | | | | | | |
| **Standard Compliance** | | | | | | | | | | | | | | | | |
| Grid Connection Standards | IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4105:2018, VDE-AR-N 4120:2018, EN 50549, AS/NZS 4777.2:2020, CEI 0-21, VDE 0126-1-1/A1 VFR 2014, UTE C15-712-1:2013, DEWA DRRG, NRS 097-2-1, MEA/PEA, C10/11, G98/G99 | | | | | | | | | | | | | | | |
| Safety / EMC | IEC 62109-1:2010, IEC 62109-2:2011, EN 61000-6-2:2005, EN 61000-6-3:2007/A1:2011 | | | | | | | | | | | | | | | |
| **General Data** | | | | | | | | | | | | | | | | |
| Dimensions (W x H x D) | 380 x 380 x 160 mm | | | | | | | | | | | | | | | |
| Weight | 13kg | | | | | | | | | | | | | | | |
| Operating Temperature Range | -30° C ~ +60° C | | | | | | | | | | | | | | | |
| Cooling Method | Natural | | | | | | Smart forced air cooling | | Natural | | | Smart forced air cooling | | | | |
| Protection Degree | IP66 | | | | | | | | | | | | | | | |
| Max. Operating Altitude | 4000m | | | | | | | | | | | | | | | |
| Relative Humidity | 0 ~ 100% | | | | | | | | | | | | | | | |
| Topology | Transformerless | | | | | | | | | | | | | | | |
| Night Power Consumption | <1W | | | | | | | | | | | | | | | |

● a：For AS4777,Rated Output Power of XG5KTL is 4999W.

● b：For VDE-AR-N 4105,Max. Output Power of XG4K6TL is 4600VA.For AS4777,Max. Output Power of XG4K6TL is 4999VA.

● c：For AS4777,Max. Output Power of XG5KTL is 4999VA.

● d：For AS4777,Max. Output Current of XG4K6TL and XG5KTL is 21.7A.

# XG3-15kW

## Three Phase On-Grid Solar Inverter


### Efficient Higher revenue

- 2MPP Trackers, high single circuit tracking accuracy, fast dynamic response.
- 160% DC Input Oversizing
- Wide MPPT voltage range: 180V-1000V
- Compatible with high power modules

### Intelligent Simple O&M

- Smart I-V Curve Diagnosis Function: locate PV string faults accurately and automatically detect faults
- Intelligent Fault Detection: ac-side voltage and current waveforms real-time recorded, fast fault location
- Support RS485/USB (WiFi/GPRS/Ethernet optional): remote monitoring and operation via PC or mobile phones

### Reliable Worry free

- IP66 Protection degree: support outdoor installation
- DC & AC Type II SPD: prevent lightning damage
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation

| | XG3KTR | XG4KTR | XG5KTR | XG6KTR | XG8KTR | XG9KTR | XG10KTR | XG11KTR | XG12KTR | XG15KTR1 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Input (DC)** | | | | | | | | | | |
| Max. Input Power | 4.8kW | 6.4kW | 8kW | 9.6kW | 12.8kW | 14.4kW | 16kW | 17.6kW | 19.2kW | 24kW |
| Max. Input Voltage | 1100V | | | | | | | | | |
| Start Voltage | 160V | | | | | | | | | |
| Rated Input Voltage | 600V | | | | | | | | | |
| Full-load MPP Voltage Range | 250V ~ 850V | | | | 320V ~ 850V | 400V ~ 850V | 450V ~ 850V | | 480V ~ 850V | 500V ~ 850V |
| MPPT Voltage Range | 180V ~ 1000V | | | | | | | | | |
| Number of MPP Trackers | 2 | | | | | | | | | |
| Number of String per MPPT | 1 / 1 | | | | | | | | | 1 / 2 |
| Max. Current per MPPT | 14A / 14A | | | | | | | | | 14A / 28A |
| Max. Short Circuit Current per MPPT | 18A / 18A | | | | | | | | | 18A / 36A |
| **Output (AC)** | | | | | | | | | | |
| Max. Output Current | 4.8A | 6.4A | 8A | 9.6A | 12.8A | 14.4A | 15.9A | 17.5A | 19.1A | 23.9A |
| Rated Output Power | 3kW | 4kW | 5kW | 6kW | 8kW | 9kW | 10kW | 11kW | 12kW | 15kW |
| Max. Output Power | 3.3kVA | 4.4kVA | 5.5kVA | 6.6kVA | 8.8kVA | 9.9kVA | 11kVA | 12.1kVA | 13.2kVA | 16.5kVA |
| Rated Grid Frequency | 50Hz / 60Hz | | | | | | | | | |
| Rated Grid Voltage | 230Vac / 400Vac, 3L / N / PE | | | | | | | | | |
| Power Factor | >0.99 (0.8 leading~0.8 lagging) | | | | | | | | | |
| THDi | <3% (Rated Power) | | | | | | | | | |
| **Efficiency** | | | | | | | | | | |
| Max. Efficiency | 98.40% | | | | 98.70% | | | | | |
| European Efficiency | 98.30% | | | | 98.50% | | | | | |
| MPPT Efficiency | 99.90% | | | | | | | | | |
| **Protection** | | | | | | | | | | |
| DC reverse polarity protection | Yes | | | | | | | | | |
| Anti-islanding protection | Yes | | | | | | | | | |
| AC short circuit protection | Yes | | | | | | | | | |
| Residual current monitoring unit | Yes | | | | | | | | | |
| Insulation resistance monitoring | Yes | | | | | | | | | |
| Ground fault monitoring | Yes | | | | | | | | | |
| Grid monitoring | Yes | | | | | | | | | |
| Surge protection | Type II | | | | | | | | | |
| AFCI protection | Optional | | | | | | | | | |
| **Communication** | | | | | | | | | | |
| Display | LED / LCD / WiFi+App | | | | | | | | | |
| Communication | Standard：RS485 / USB<br>Optional：WiFi / GPRS / Ethernet | | | | | | | | | |
| **Standard Compliance** | | | | | | | | | | |
| Grid Connection Standards | IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4105:2018, VDE-AR-N 4120:2018, EN 50549, AS/NZS 4777.2:2020, CEI 0-21, VDE 0126-1-1/A1 VFR 2014, UTE C15-712-1:2013, DEWA DRRG, NRS 097-2-1, MEA/PEA, C10/11, G98/G99 | | | | | | | | | |
| Safety / EMC | IEC 62109-1:2010, IEC 62109-2:2011, EN 61000-6-2:2005, EN 61000-6-3:2007/A1:2011 | | | | | | | | | |
| **General Data** | | | | | | | | | | |
| Dimensions (W x H x D) | 481 x 395 x 195 mm | | | | | | | | | |
| Weight | 12kg | | | | 13.5kg | | | | | |
| Operating Temperature Range | -30° C ~ +60° C | | | | | | | | | |
| Cooling Method | Natural | | | | | | | | | Smart Cooling |
| Protection Degree | IP66 | | | | | | | | | |
| Max. Operating Altitude | 4000m | | | | | | | | | |
| Relative Humidity | 0 ~ 100% | | | | | | | | | |
| Topology | Transformerless | | | | | | | | | |
| Night Power Consumption | <1W | | | | | | | | | |

# XG15-25kW

## Three Phase On-Grid Solar Inverter

### Efficient Higher revenue

- 2 MPP Trackers, high single circuit tracking accuracy,  fast dynamic response
- 160% DC Input Oversizing
- Maximum efficiency 98.4%. Wide MPPT voltage range: 200V-1000V
- Compatible with high power modules.

### Intelligent Simple O&M

- Smart I-V Curve Diagnosis Function:  locate PV string faults accurately and automatically detect faults
- Intelligent Fault Detection: ac-side voltage and current waveforms real-time recorded, fast fault location
- Support RS485/USB (WiFi/GPRS/Ethernet optional): remote monitoring and operation via PC or mobile phones

### Reliable Worry free

- IP66 Protection degree: support outdoor installation
- DC & AC Type II SPD: prevent lightning damage
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation

| | XG15KTR | XG17KTR | XG20KTR | XG22KTR | XG25KTR |
|---|---|---|---|---|---|
| **Input (DC)** | | | | | |
| Max. Input Power | 24kW | 27.2kW | 32kW | 35.2kW | 40kW |
| Max. Input Voltage | 1100V | | | | |
| Start Voltage | 250V | | | | |
| Rated Input Voltage | 600V | | | | |
| Full-load MPP Voltage Range | 480V ~ 800V | | | 520V ~ 800V | 560V ~ 800V |
| MPPT Voltage Range | 200V ~ 1000V | | | | |
| Number of MPP Trackers | 2 | | | | |
| Number of string per MPPT | 2 / 2 | | | | 2 / 3 |
| Max. Current per MPPT | 26A | | | | 26A / 39A |
| Max. Short Circuit Current per MPPT | 32A | | | | 32A / 48A |
| **Output (AC)** | | | | | |
| Max. Output Current | 24.1A | 27.2A | 32.1A | 35.3A | 39.8A |
| Rated Output Power | 15kW | 17kW | 20kW | 22kW | 25kW |
| Max. Output Power | 16.6kVA | 18.8kVA | 22.2kVA | 24.4kVA | 27.5kVA |
| Rated Grid Frequency | 50Hz / 60Hz | | | | |
| Rated Grid Voltage | 230Vac / 400Vac, 3L / N / PE | | | | |
| Power Factor | >0.99 (0.8 leading~0.8 lagging) | | | | |
| THDi | <3% (Rated Power) | | | | |
| **Efficiency** | | | | | |
| Max. Efficiency | 98.40% | | | | |
| European Efficiency | 98.00% | | | | |
| MPPT Efficiency | 99.90% | | | | |
| **Protection** | | | | | |
| DC reverse polarity protection | Yes | | | | |
| Anti-islanding protection | Yes | | | | |
| AC short circuit protection | Yes | | | | |
| Residual current monitoring unit | Yes | | | | |
| Insulation resistance monitoring | Yes | | | | |
| Ground fault monitoring | Yes | | | | |
| Grid monitoring | Yes | | | | |
| PV string monitoring | Yes | | | | |
| Surge protection | Type II | | | | |
| AFCI protection | Optional | | | | |
| **Communication** | | | | | |
| Display | LED / LCD / WiFi+App | | | | |
| Communication | Standard：RS485/ USB<br>Optional：WiFi / GPRS / Ethernet | | | | |
| **Standard Compliance** | | | | | |
| Grid Connection Standards | IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4105:2018, VDE-AR-N 4120:2018, EN 50549, AS/NZS 4777.2:2020, CEI 0-21, VDE 0126-1-1/A1 VFR 2014, UTE C15-712-1:2013, DEWA DRRG, NRS 097-2-1, MEA/PEA, C10/11, G98/G99 | | | | |
| Safety / EMC | IEC 62109-1:2010, IEC 62109-2:2011, EN 61000-6-2:2005, EN 61000-6-3:2007/A1:2011 | | | | |
| **General Data** | | | | | |
| Dimensions (W x H x D) | 534 x 440 x 220 mm | | | | |
| Weight | 24kg | | | | |
| Operating Temperature Range | -30° C ~ +60° C | | | | |
| Cooling Method | Smart Cooling | | | | |
| Protection Degree | IP66 | | | | |
| Max. Operating Altitude | 4000m | | | | |
| Relative Humidity | 0 ~ 100% | | | | |
| Topology | Transformerless | | | | |
| Night Power Consumption | <1W | | | | |

# XG25-40kW

## Three Phase On-Grid Solar Inverter

### Efficient
### Higher revenue

- 3-4 MPP Trackers, high single circuit tracking accuracy,  fast dynamic response
- 160% DC Input Oversizing
- Maximum efficiency of 98.6%. Wide MPPT voltage range: 200V-1000V
- Compatible with high power modules

### Intelligent
### Simple O&M

- Smart I-V Curve Diagnosis Function:  locate PV string faults accurately and automatically detect faults
- Intelligent Fault Detection: ac-side voltage and current waveforms real-time recorded, fast fault location
- Support RS485/USB (WiFi/GPRS/Ethernet optional): remote monitoring and operation via PC or mobile phones

### Reliable
### Worry free

- IP66 Protection degree: support outdoor installation
- DC & AC Type II SPD: prevent lightning damage
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation

| | XG25KTR-3M | XG30KTR | XG33KTR | XG36KTR | XG40KTR |
|---|---|---|---|---|---|
| **Input (DC)** | | | | | |
| Max. Input Power | 40kW | 48kW | 52.8kW | 57.6kW | 64kW |
| Max. Input Voltage | 1100V | | | | |
| Start Voltage | 250V | | | | |
| Rated Input Voltage | 600V | | | | |
| Full-load MPP Voltage Range | 450V ~ 800V | 500V ~ 800V | | | |
| MPPT Voltage Range | 200V ~ 1000V | | | | |
| Number of MPP Trackers | 3 | | | 4 | |
| String per MPPT | 2 | | | | |
| Max. Current per MPPT | 26A | | | | |
| Max. Short Circuit Current per MPPT | 32A | | | | |
| **Output (AC)** | | | | | |
| Max. Output Current | 40.1A | 48.3A | 53A | 57.8A | 64.3A |
| Rated Output Power | 25kW | 30kW | 33kW | 36kW | 40kW |
| Max. Output Power | 27.7kVA | 33.3kVA | 36.6kVA | 39.6kVA | 44kVA |
| Rated Grid Frequency | 50Hz / 60Hz | | | | |
| Rated Grid Voltage | 230Vac / 400Vac, 3L / N / PE | | | | |
| Power Factor | >0.99 (0.8 leading~0.8 lagging) | | | | |
| THDi | <3% (Rated Power) | | | | |
| **Efficiency** | | | | | |
| Max. Efficiency | 98.60% | | | | |
| European Efficiency | 98.50% | | | | |
| MPPT Efficiency | 99.90% | | | | |
| **Protection** | | | | | |
| DC reverse polarity protection | Yes | | | | |
| Anti-islanding protection | Yes | | | | |
| AC short circuit protection | Yes | | | | |
| Residual current monitoring unit | Yes | | | | |
| Insulation resistance monitoring | Yes | | | | |
| Ground fault monitoring | Yes | | | | |
| Grid monitoring | Yes | | | | |
| PV string monitoring | Yes | | | | |
| Surge protection | Type II | | | | |
| AFCI protection | Optional | | | | |
| **Communication** | | | | | |
| Display | LED / LCD / WiFi+App | | | | |
| Communication | Standard：RS485/ USB<br>Optional：WiFi / GPRS / Ethernet | | | | |
| **Standard Compliance** | | | | | |
| Grid Connection Standards | IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4105:2018, VDE-AR-N 4120:2018, EN 50549, AS/NZS 4777.2:2020, CEI 0-21, VDE 0126-1-1/A1 VFR 2014, UTE C15-712-1:2013, DEWA DRRG, NRS 097-2-1, MEA/PEA, C10/11, G98/G99 | | | | |
| Safety / EMC | IEC 62109-1:2010, IEC 62109-2:2011, EN 61000-6-2:2005, EN 61000-6-3:2007/A1:2011 | | | | |
| **General Data** | | | | | |
| Dimensions (W x H x D) | 600 x 430 x 230 mm | | | | |
| Weight | 30kg | | | 32kg | |
| Operating Temperature Range | -30° C ~ +60° C | | | | |
| Cooling Method | Smart Cooling | | | | |
| Protection Degree | IP66 | | | | |
| Max. Operating Altitude | 4000m | | | | |
| Relative Humidity | 0 ~ 100% | | | | |
| Topology | Transformerless | | | | |
| Night Power Consumption | <1W | | | | |

# XG50-70kW

## Three Phase On-Grid Solar Inverter

### Efficient Higher revenue

- 4 MPP Trackers, high single circuit tracking accuracy,  fast dynamic response and higher power generation
- 160% DC Input Oversizing
- Wide MPPT voltage range: 200V-1000V
- Compatible with high power modules

### Intelligent Simple O&M

- Smart I-V Curve Diagnosis Function:  locate PV string faults accurately and automatically detect faults
- Intelligent Fault Detection: ac-side voltage and current waveforms real-time recorded, fast fault location
- Support RS485/USB (WiFi/GPRS/Ethernet optional): remote monitoring and operation via PC or mobile phones

### Reliable Worry free

- IP66 Protection degree: support outdoor installation
- DC & AC Type II SPD: prevent lightning damage
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation

| | XG50KTR | XG50KTRL | XG60KTR | XG60KTRL | XG66KTRL | XG70KTRL |
|---|---|---|---|---|---|---|
| **Input (DC)** | | | | | | |
| Max. Input Power | 80kW | | 96kW | | 105.6kW | 112kW |
| Max. Input Voltage | 1100V | | | | | |
| Start Voltage | 250V | | | | | |
| Rated Input Voltage | 600V | | | | 700V | |
| Full-load MPP Voltage Range | 520V ~ 850V | | | | 600V ~ 850V | |
| MPPT Voltage Range | 200V ~ 1000V | | | | | |
| Number of MPP Trackers | 4 | | | | | |
| Number of string per MPPT | 3 / 2 / 3 / 2 | | 3 / 3 / 3 / 3 | | | |
| Max. Current per MPPT | 39A / 26A / 39A / 26A | | 39A | | | |
| Max. Short Circuit Current per MPPT | 48A / 32A / 48A / 32A | | 48A | | | |
| **Output (AC)** | | | | | | |
| Max. Output Current | 79.7A | 66.2A | 95.6A | 79.4A | 87.4A | 92.6A |
| Rated Output Power | 50kW | | 60kW | | 66kW | 70kW |
| Max. Output Power | 55kVA | | 66kVA | | 72.6kVA | 77kVA |
| Rated Grid Frequency | 50Hz / 60Hz | | | | | |
| Rated Grid Voltage | 230Vac / 400Vac | 277Vac / 480Vac | 230Vac / 400Vac | 277Vac / 480Vac | | |
| Power Factor | >0.99 (0.8 leading~0.8 lagging) | | | | | |
| THDi | <3% (Rated Power) | | | | | |
| **Efficiency** | | | | | | |
| Max. Efficiency | 98.70% | | 98.80% | | | |
| European Efficiency | 98.40% | | | | 98.50% | |
| MPPT Efficiency | 99.90% | | | | | |
| **Protection** | | | | | | |
| DC reverse polarity protection | Yes | | | | | |
| Anti-islanding protection | Yes | | | | | |
| AC short circuit protection | Yes | | | | | |
| Residual current monitoring unit | Yes | | | | | |
| Insulation resistance monitoring | Yes | | | | | |
| Ground fault monitoring | Yes | | | | | |
| Grid monitoring | Yes | | | | | |
| PV string monitoring | Yes | | | | | |
| Surge protection | Type II | | | | | |
| AFCI protection | Optional | | | | | |
| **Communication** | | | | | | |
| Display | LED / LCD / WiFi+App | | | | | |
| Communication | Standard：RS485/ USB<br>Optional：WiFi / GPRS / Ethernet | | | | | |
| **Standard Compliance** | | | | | | |
| Grid Connection Standards | IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4105:2018, VDE-AR-N 4120:2018, EN 50549, AS/NZS 4777.2:2020, CEI 0-21, VDE 0126-1-1/A1 VFR 2014, UTE C15-712-1:2013, DEWA DRRG, NRS 097-2-1, MEA/PEA, C10/11, G98/G99 | | | | | |
| Safety / EMC | IEC 62109-1:2010, IEC 62109-2:2011, EN 61000-6-2:2005, EN 61000-6-3:2007/A1:2011 | | | | | |
| **General Data** | | | | | | |
| Dimensions (W x H x D) | 650 x 450 x 260 mm | | | | | |
| Weight | 50kg | | | | | |
| Operating Temperature Range | -30° C ~ +60° C | | | | | |
| Cooling Method | Smart Cooling | | | | | |
| Protection Degree | IP66 | | | | | |
| Max. Operating Altitude | 4000m | | | | | |
| Relative Humidity | 0 ~ 100% | | | | | |
| Topology | Transformerless | | | | | |
| Night Power Consumption | <1W | | | | | |

# XG100-136kW

## Three Phase On-Grid Solar Inverter


### Efficient Higher revenue

- 9-12 MPP Trackers, high single circuit tracking accuracy,  fast dynamic response and higher power generation
- 150% DC Input Oversizing
- Maximum efficiency of 98.7%. Wide MPPT voltage range: 180V-1000V
- Compatible with high power modules

### Intelligent Simple O&M

- Smart I-V Curve Diagnosis Function:  locate PV string faults accurately and automatically detect faults
- Intelligent Fault Detection: ac-side voltage and current waveforms real-time recorded, fast fault location
- Support RS485/USB (WiFi/DRM/Bluetooth optional): remote monitoring and operation via PC or mobile phones

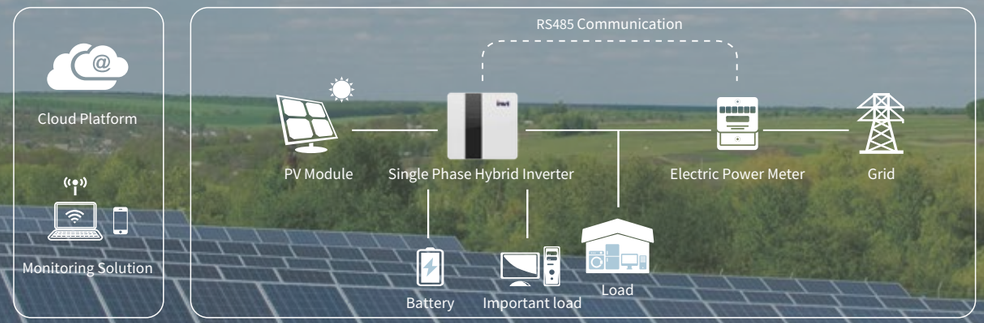
### Reliable Worry free

- IP66 Protection degree: support outdoor installation
- DC & AC Type II SPD: prevent lightning damage
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation

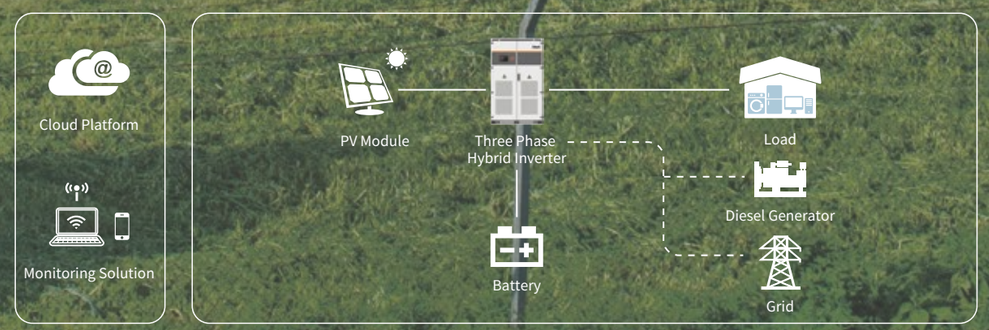
| | XG100KTR | XG100KTR-F | XG110KTR | XG110KTR-F | XG136KTR-L | XG136KTR-LF | XG136KTR-X | XG136KTR-XF |
|---|---|---|---|---|---|---|---|---|
| **Input (DC)** | | | | | | | | |
| Max. Input Power | 150kW | | | | 160kW | | | |
| Max. Input Voltage | 1100V | | | | | | | |
| Start Voltage | 250V | | | | | | | |
| Rated Input Voltage | 620V | | | | 730V | | 780V | |
| Full-load MPP Voltage Range | 530V ~ 850V | | | | 560V ~ 850V | | | |
| MPPT Voltage Range | 180V ~ 1000V | | | | | | | |
| Number of MPP Trackers | 9 | | 10 | | 12 | | | |
| String per MPPT | 2 | | | | | | | |
| Max. Current per MPPT | 26A | 30A | 26A | 30A | 26A | 30A | 26A | 30A |
| Max. Short Circuit Current per MPPT | 40A | | | | | | | |
| **Output (AC)** | | | | | | | | |
| Max. Output Current | 158.8A | | 174.6A | | | | 160.4A | |
| Rated Output Power | 100kW | | 110kW | | 136kW | | | |
| Max. Output Power | 110kVA | | 121kVA | | 150kVA | | | |
| Rated Grid Frequency | 50Hz / 60Hz | | | | | | | |
| Rated Grid Voltage | 230Vac / 400Vac, 3L / N / PE, 3L / PE | | | | 277Vac / 480Vac, 3L / N / PE, 3L / PE | | 311Vac / 540Vac, 3L / N / PE, 3L / PE | |
| Power Factor | >0.99 (0.8 leading~0.8 lagging) | | | | | | | |
| THDi | <3% (Rated Power) | | | | | | | |
| **Efficiency** | | | | | | | | |
| Max. Efficiency | 98.70% | | | | | | | |
| European Efficiency | 98.50% | | | | | | | |
| MPPT Efficiency | 99.90% | | | | | | | |
| **Protection** | | | | | | | | |
| DC reverse polarity protection | Yes | | | | | | | |
| Anti-islanding protection | Yes | | | | | | | |
| AC short circuit protection | Yes | | | | | | | |
| Residual current monitoring unit | Yes | | | | | | | |
| Insulation resistance monitoring | Yes | | | | | | | |
| Ground fault monitoring | Yes | | | | | | | |
| Grid monitoring | Yes | | | | | | | |
| PV string monitoring | Yes | | | | | | | |
| Surge protection | Type II | | | | | | | |
| AFCI protection | Optional | | | | | | | |
| PID recovery function | Optional | | | | | | | |
| SVG function | Optional | | | | | | | |
| **Communication** | | | | | | | | |
| Display | LED / LCD / WiFi+App | | | | | | | |
| Communication | Standard：RS485/ USB<br>Optional：WiFi / DRM / Bluetooth | | | | | | | |
| **Standard Compliance** | | | | | | | | |
| Grid Connection Standards | IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE-AR-N 4110:2018, VDE-AR-N 4105:2018, VDE-AR-N 4120:2018, EN 50549, AS/NZS 4777.2:2020, CEI 0-21, VDE 0126-1-1/A1 VFR 2014, UTE C15-712-1:2013, DEWA DRRG, NRS 097-2-1, MEA/PEA, C10/11, G98/G99 | | | | | | | |
| Safety / EMC | IEC 62109-1:2010, IEC 62109-2:2011, EN 61000-6-2:2005, EN 61000-6-3:2007/A1:2011 | | | | | | | |
| **General Data** | | | | | | | | |
| Dimensions (W x H x D) | 1050 x 660 x 330 mm | | | | | | | |
| Weight | 95kg | | 98kg | | 101kg | | | |
| Operating Temperature Range | -30° C ~ +60° C | | | | | | | |
| Cooling Method | Smart Cooling | | | | | | | |
| Protection Degree | IP66 | | | | | | | |
| Max. Operating Altitude | 4000m | | | | | | | |
| Relative Humidity | 0 ~ 100% | | | | | | | |
| Topology | Transformerless | | | | | | | |
| Night Power Consumption | <1W | | | | | | | |

# Energy Storage Solution

## Residential Storage System




## Commercial Storage System



# BD3-6kW-RL1

## Single Phase Hybrid Inverter (Battery 48V)

### Efficient
### Higher revenue

- Maximum efficiency: 97.6%
- Input power source priority can be set by users

### Intelligent
### Simple O&M

- IP65 Protection Degree: support outdoor installation
- Battery reverse connection protection.
- Support RS485/CAN/DRM (WiFi/4G optional)：remote monitoring and operation via PC or mobile phones

### Flexible
### Abundant configuration

- Support automatic battery switch
- Support diesel generator as input source
- Parallel available, intelligent BMS management
- Export control (Zero export)
- Compatible with lead-acid and lithium-ion batteries

| | BD3KTL-RL1 | BD3K6TL-RL1 | BD4KTL-RL1 | BD4K6TL-RL1 | BD5KTL-RL1 | BD6KTL-RL1 |
|---|---|---|---|---|---|---|
| **Input (PV)** | | | | | | |
| Max. PV Input Power | 4.6kW | | 6kW | | 7kW | |
| Max. PV Input Voltage | 550V | | | | | |
| MPP Voltage Range | 125V ~ 500V | | | | | |
| Max. PV Input Current | 14A | | | | | |
| Number of MPP Trackers / String per MPPT | 2 / 1 | | | | | |
| **Output (AC)** | | | | | | |
| Max. Output Current | 13A | 16A | 17.4A | 20A | 21.7A | 26A |
| Rated Power | 3kVA | 3.6kVA | 4kVA | 4.6kVA | 5kVA | 6kVA |
| Rated Voltage | 230V, L + N + PE | | | | | |
| Operating Voltage Range | 176V ~ 270V | | | | | |
| Frequency | 50Hz / 60Hz | | | | | |
| Power Factor | 0.8 lagging~0.8 leading | | | | | |
| THDi | <3% | | | | | |
| **Output (EPS)** | | | | | | |
| Rated Power | 3kVA | 3.6kVA | 4kVA | 4.6kVA | 5kVA | 6kVA |
| Rated Voltage | 230Vac | | | | | |
| Rated Current | 13A | 16A | 17.4A | 20A | 21.7A | 26A |
| Rated Frequency | 50Hz / 60Hz | | | | | |
| Automatic Switching Time | <20ms | | | | | |
| Overload Capability | 110%, 30s / 120%, 10s / 150%, 0.02s | | | | | |
| THDu | <2% | | | | | |
| **Battery** | | | | | | |
| Battery Voltage Range | 40V ~ 58V | | | | | |
| Max. Charging Voltage | 58V | | | | | |
| Charge / Discharge Current | 95A / 62.2A | 95A/ 75A | 95A / 83.3A | 95A / 95.8A | 95A / 104.2A | 95 A/ 110A |
| Battery Type | Lithium / Lead-acid | | | | | |
| Communication | CAN / RS485 | | | | | |
| **Efficiency** | | | | | | |
| Max. DC Efficiency | 97.60% | | | | | |
| European Efficiency | 97.0% | | | | | |
| MPPT Efficiency | 99.90% | | | | | |
| Battery Charge / Discharge Efficiency | 95.0% | | | | | |
| **Communication** | | | | | | |
| Display | LCD | | | | | |
| Communication | standard: RS485 / CAN / DRM<br>optional: WIFI / 4G | | | | | |
| **Standard Compliance** | | | | | | |
| Certificates | CE, TUV, SAA, NRS | | | | | |
| **General Data** | | | | | | |
| Dimensions (W x H x D) | 550 x 515 x 200 mm | | | | | |
| Weight | 25kg | | | | | |
| Operation Temperature | -25°C ~ +60°C | | | | | |
| Cooling Method | Natural Cooling | | | | | |
| Protection Degree | IP65 | | | | | |
| Noise Emission | <35dB | | | | | |
| Max. Operating Altitude | 2000m | | | | | |
| Relative Humidity | 0 ~ 95% (non-condensing) | | | | | |
| Topology | Transformerless | | | | | |
| Standby Power Comsuption | ＜ 3W | | | | | |

# BD5-10kW-RLN

## North American Split-phase Inverter (Battery 48V)

### Efficient
### Higher revenue

- Bypass current capacity up to 100A
- 4 MPP Trackers: Max. Maximum efficiency: 98.8%. CEC efficiency: 97.2%
- Support 100% unbalanced load capacity

### Intelligent
### Simple O&M

- IP65 Protection Degree: support outdoor installation
- Battery reverse connection protection
- Automatic management of battery charge and discharge
- Support RS485/CAN/DRM (WiFi/4G optional): remote monitoring and operation via PC or mobile phones

### Flexible
### Abundant configuration

- Parallel available
- Export control(Zero export)

| | BD5KTL-RLN | BD6KTL-RLN | BD8KTL-RLN | BD10KTL-RLN |
|---|---|---|---|---|
| **Input (PV)** | | | | |
| Max. Input Power | 7.5kW | 9kW | 12kW | 13kW |
| Max. DC Voltage | 500V | | | |
| MPP Voltage Range | 120V~ 500V | | | |
| Max. PV Input Current | 12A | | | |
| Number of MPP Trackers | 4 | | | |
| String per MPPT | 1 | | | |
| **Output (AC)** | | | | |
| Rated AC Output Power | 5kVA | 6kVA | 8kVA | 10kVA |
| Max Output Current | 24A | 28.8A | 38.3A | 47.8A |
| AC Output Voltage | 120Vac / 240Vac (split phase), 208Vac (2/3 phase), 230Vac (single phase) | | | |
| Frequency | 50Hz / 60Hz | | | |
| Power Factor | 0.8 leading ~ 0.8 lagging | | | |
| THDi | <3% | | | |
| **Output (EPS)** | | | | |
| Rated Output Power | 5kVA | 6kVA | 8kVA | 10kVA |
| Overload Capacity | 125%, 60S / 150%,1S | | | |
| Backup AC Output Voltage | 120Vac / 240Vac (split phase), 208Vac (2/3 phase), 230Vac ( single phase) | | | |
| Frenquency | 50Hz / 60Hz | | | |
| THDu | <2% | | | |
| **Battery** | | | | |
| Battery Voltage Range | 40V~58V | | | |
| Max. Charge Voltage | 58V | | | |
| Max. Charge / Discharge Current | 120A / 120A | 135A / 135A | 190A / 190A | 210A / 210A |
| Battery Type | Lithium / Lead-acid | | | |
| Communication | CAN / RS485 | | | |
| **Efficiency** | | | | |
| Max. Efficiency | ⩾ 98.2% | | | |
| CEC Efficiency | ⩾ 97.2% | | | |
| **Communication** | | | | |
| Display | LCD / Touch Screen | | | |
| Communication | RS485 / WiFi / 4G / CAN / DRM | | | |
| **Standard Compliance** | | | | |
| Safty | UL1741SA all options, UL1699B, CSA 22.2 | | | |
| EMC | FCC Part 15, Class B | | | |
| On Grid | IEEE 1547, IEEE 2030.5, Hawaii Rule 14H, Rule 21 Phase I,II,III, NRS | | | |
| **General Data** | | | | |
| Dimensions (W x H x D) | 430 x 710 x 220 mm | | | |
| Weight | 41kg | | | |
| Operation Temperature | -25 °C ~ +60°C | | | |
| Cooling Method | Natural Cooling | | | |
| Protection Degree | IP65 / NEMA 3R | | | |
| Noise Emission | <25dB | <29dB | | |
| Max. Operating Altitude | 2000m | | | |
| Relative Humidity | 0 ~ 95% (non-condensing) | | | |
| Topology | Transformerless | | | |
| Self-consumption | <3W | | | |

# BD6-12kW-RH1N

## North American Split-phase Inverter (Battery＞80V)

### Efficient
### Higher revenue

- Bypass current capacity up to 100A
- 4 MPP Trackers. Maximum efficiency: 98.2%. CEC efficiency: 97.2%
- Support 100% unbalanced load capacity
- Support full power discharge, automatic management of battery charge and discharge

### Intelligent
### Simple O&M

- IP65 Protection: support outdoor installation
- Battery reverse connection protection.
- Support RS485/CAN/DRM (WiFi/4G optional): remote monitoring and operation via PC or mobile phones

### Flexible
### Abundant configuration

- Compatible with lead-acid and lithium-ion batteries and other battery access.
- Export control(Zero export)

| | BD6KTL-RH1N | BD8KTL-RH1N | BD10KTL-RH1N | BD12KTL-RH1N |
|---|---|---|---|---|
| **Input (PV)** | | | | |
| Max. Input Power | 7.8kW | 10.4kW | 13kW | 15.6kW |
| Max. DC Voltage | 500V | | | |
| MPP Voltage Range | 125V~500V | | | |
| Max. PV Input Current | 12A | | | |
| Number of MPP Trackers / String per MPPT | 4 /1 | | | |
| **Output (AC)** | | | | |
| Max. Output Current | 27.3A | 36.4A | 45.4A | 50A |
| Rated AC Output Power | 6kVA | 8kVA | 10kVA | 11.4kVA |
| AC Output Voltage | 240V, L+N+PE | | | |
| Grid Voltage Range | 211V~264V | | | |
| Frequency | 50Hz / 60Hz | | | |
| Power Factor | 0.8 lagging ~ 0.8 leading | | | |
| THDi | ＜3% | | | |
| **Output (EPS)** | | | | |
| Rated Output Power | 6kVA | 8kVA | 10kVA | 12kVA |
| Rated Output Voltage | 220V~240V / 110V~120V | | | |
| Overload capacity | 110%, 30S / 120%, 10S / 150%, 0.02S | | | |
| Automatic Switching Time | ＜20ms | | | |
| Frenquency | 50Hz / 60Hz | | | |
| THDu | ＜2% | | | |
| **Battery** | | | | |
| Battery Voltage Range | 85V~400V | | | |
| Max. Charging Voltage | 400V | | | |
| Max. Charge / Discharge Current | 80A / 80A | | | |
| Battery Type | Lithium / Lead-acid | | | |
| Communication | CAN / RS485 | | | |
| **Efficiency** | | | | |
| Max. Efficiency | ⩾ 98.2% | | | |
| CEC Efficiency | ⩾ 97.2% | | | |
| **Communication** | | | | |
| Display | LCD | | | |
| Communication | Standard: RS485 / CAN / DRM<br>Optional: Wifi / 4G | | | |
| **Standard Compliance** | | | | |
| Safty | UL1741SA all options, UL1699B, CSA 22.2 | | | |
| EMC | FCC Part 15, Class B | | | |
| On Grid | IEEE 1547, IEEE 2030.5, Hawaii Rule 14H, Rule 21 Phase I,II,III | | | |
| **General Data** | | | | |
| Dimensions (W x H x D) | 530 x 660 x 200 mm | | | |
| Weight | 32kg | | | |
| Operation Temperature | -25℃～+60℃ | | | |
| Cooling Method | Natural Cooling | | | |
| Protection Degree | IP65 / NEMA 3R | | | |
| Noise Emission | ＜25dB | | ＜29dB | |
| Max. Operating Altitude | 2000m | | | |
| Relative Humidity | 0 ~95% (non-condensing) | | | |
| Topology | Transformerless | | | |
| Standby Power Consumption | < 2.5W (With the battery < 5W ) | | | |

# BD8-12kW-RH3

## Three Phase Hybrid Inverter

### Efficient
### Higher revenue

- Maximum efficiency: 98.2%
- Input power source priority can be set by users
- Support full power discharge, automatic management of battery charge and discharge

### Intelligent
### Simple O&M

- IP65 Protection: support outdoor installation
- Battery reverse connection protection
- Support RS485/CAN/DRM (WiFi/4G optional): remote monitoring and operation via PC or mobile phones

### Flexible
### Abundant configuration

- Support diesel generator input source
- Compatible with lead-acid and lithium-ion batteries and other battery access
- Export control(Zero export)

| | BD8KTR-RH3 | BD10KTR-RH3 | BD12KTR-RH3 |
|---|---|---|---|
| **Input (PV)** | | | |
| Max. PV Input Power | 10.4kW | 13kW | 15.6kW |
| Max. PV Input Voltage | | 1000V | |
| Max. Current per MPPT | | 12.5A | |
| MPP Voltage Range | | 180V ~ 850V | |
| Number of MPP Trackers | | 2 | |
| String per MPPT | | 1 | |
| **Output (AC)** | | | |
| Max. Output Current | 12.7A | 15.9A | 19.1A |
| Rated Output Power | 8.8kVA | 11kVA | 13.2kVA |
| Rated Voltage | | 400V, 3L + N + PE | |
| Frequency | | 50Hz / 60Hz | |
| Power Factor | | 0.8 lagging~0.8 leading | |
| THDi | | < 3% | |
| **Output (EPS)** | | | |
| Max. Output Power | 8.8kVA | 11kVA | 13.2kVA |
| Rated Voltage | | 400Vac | |
| Rated Current | 12.7A | 15.9A | 19.1A |
| Overload Capacity | | 110%, 30S / 120%, 10S / 150%, 0.02S | |
| Rated Frequency | | 50Hz / 60Hz | |
| Automatic Switching Time | | < 20ms | |
| THDu | | < 2% | |
| **Battery** | | | |
| Battery Voltage Range | | 125V ~ 600V | |
| Max. Charging Voltage | | 600V | |
| Full Battery Voltage | 210V | 270V | 250V |
| Max. Charge / Discharge Current | 40A | 40A | 50A |
| Battery Type | | Lithium / Lead-acid | |
| Communication | | CAN / RS485 | |
| **Efficiency** | | | |
| Max. DC Efficiency | 97.90% | 98.20% | 98.20% |
| European Efficiency | 97.20% | 97.50% | 97.50% |
| MPPT Efficiency | 99.50% | 99.50% | 99.50% |
| Battery Charge / Discharge Efficiency | 96.60% | 96.70% | 96.80% |
| **Communication** | | | |
| Display | | LCD | |
| Communication | | Standard: RS485 / CAN / DRM<br>Optional: WiFi / 4G | |
| **Standard Compliance** | | | |
| Certificates | | CE, TÜV | |
| **General data** | | | |
| Dimensions (W x H x D) | | 530 × 600 × 200 mm | |
| Weight | | 29kg | |
| Operation Temperature | | -25°C ~ +60°C | |
| Cooling Method | | Natural Cooling | |
| Protection Degree | | IP65 | |
| Noise Emission | | < 35dB | |
| Max. Operating Altitude | | 2000m | |
| Relative Humidity | | 0~95% (non-condensing) | |
| Topology | | Transformerless | |
| Standby Power Consumption | | < 3W | |

# BD30-500kW-P

## Energy Storage System (All in one)

### Intelligent Simple O&M

- Support battery capacity and discharge time prediction
- Smooth switching between on and off grid, uninterrupted supply of load
- Operate with EMS to monitor system status in real time
- Support RS485/CAN: remote monitoring and operation via PC or mobile phones

### Flexible Abundant configuration

- Various working modes can be set flexibly
- PV controller modular design, easy to expand
- Integrated design, easy to integrate
- Support simultaneous access of load, battery, power grid , diesel and PV
- Built-in maintenance bypass switch, improve system availability

### Reliable Worry free

- Built-in isolation transformer for high load adaptability
- Perfect protection function for inverter and battery
- Redundancy design for important functions

| | BD30KTR-P | BD50KTR-P | BD100KTR-P | BD150KTR-P | BD250KTR-P | BD500KTR-P |
|---|---|---|---|---|---|---|
| **AC (On-grid)** | | | | | | |
| Apparent Power | 33kVA | 55kVA | 110kVA | 165kVA | 275kVA | 550kVA |
| Aated Power | 30kW | 50kW | 100kW | 150kW | 250kW | 500kW |
| Rated Current | 43A | 72A | 144A | 216A | 361A | 722A |
| Rated Voltage | 400V | | | | | |
| Rated Frequency | 50Hz / 60Hz | | | | | |
| Rated Grid Voltage | 320V ~ 460V, 3W + N + PE | | | | | |
| Power Factor | 1 lagging~1 leading | | | | | |
| THDi | <3% | | | | | |
| Transformer Ratio | 100 / 400 | 200 / 400 | 270 / 400 | 270 / 400 | 270 / 400 | 315 / 400 |
| **AC (Off-grid)** | | | | | | |
| Apparent Power | 33kVA | 55kVA | 110kVA | 165kVA | 275kVA | 550kVA |
| Aated Power | 30kW | 50kW | 100kW | 150kW | 250kW | 500kW |
| Rated Current | 43A | 72A | 144A | 216A | 361A | 722A |
| Rated voltage | 400V | | | | | |
| Rated Frequency | 50Hz / 60Hz | | | | | |
| Overload Capability | 110% Continuous | | | | | |
| THDu | ⩽ 1% linear; ⩽ 5% nonlinear | | | | | |
| **Input (PV)** | | | | | | |
| Max. PV Input Voltage | 1000V | | | | | |
| Max. PV Input Power | 60kW / 120kW | | 120kW / 180kW / 240kW | | 300kW / 360kW | 600kW / 660kW / 720kW |
| MPPT Voltage Range | 250V ~ 850V | | | | | |
| MPPT voltage Range @Full Load | 450V ~ 850V | | | | | |
| **Battery** | | | | | | |
| Battery Voltage Range | 250V ~ 850V | 320V ~ 850V | 420V ~ 850V | | | 500V ~ 850V |
| Max. Charging Power | 60kW / 120kW | | 120kW / 180kW / 240kW | | 300kW / 360kW | 600kW / 660kW / 720kW |
| **Communication** | | | | | | |
| Display | LCD | | | | | |
| BMS Communication | RS485, CAN | | | | | |
| EMS Communication | RS485, TCP/IP | | | | | |
| **Standard Compliance** | | | | | | |
| Certificates | CE, TÜV | | | | | |
| **General Data** | | | | | | |
| Dimensions (W x H x D) | 800 x 1900 x 800 mm | | 1200 x 2050 x 800 mm | | (600 x 2050 x 720 mm) x 1+ 1800 x 2050 x 800 mm | (600 x 2050 x 720 mm) x 2+ 2800 x 2050 x 1050mm |
| Weight | 620kg / 650kg | 720kg / 750kg | 1120kg / 1150kg /1180kg | 1250kg / 1280kg /1310kg | 1980kg / 2010kg | 3265kg / 3295kg /3325kg |
| Operation Temperature | -30° C ~ +55° C | | | | | |
| Cooling Method | Smart Air Cooling | | | | | |
| Protection Degree | IP20 | | | | | |
| Noise Emission | <70dB | | | | | |
| Max. Operating Altitude | 5000m (derating above 3000 m) | | | | | |
| Relative Humidity | 0 ~ 95% (non-condensing) | | | | | |

# BD30-500kW-MT

## Energy Storage Converter (With Transformer)


### Intelligent Simple O&M

- Highest power density. Maximum efficiency: 97.5%
- With grid-connected charging and discharging, off-grid independent inverter function

### Flexible Abundant configuration

- Wide battery voltage range, support multiple battery access
- Reactive power, active power adjustable
- Off-grid cold start function, support multi-machine inverter parallel function
- Integrated design for easy transportation and integration
- Integrated on and off -grid automatic switch components, saving the cost
- Support RS485, CAN communication mode, can accept BMS instruction in real time

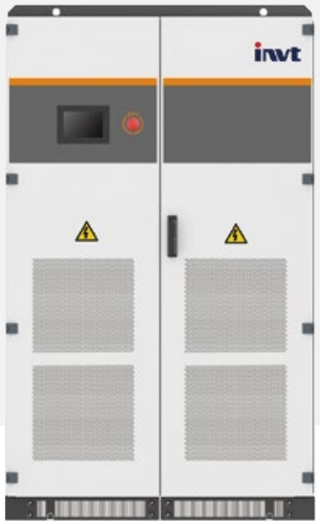
### Reliable Worry free

- High performance DSP, optimized control circuit deisgn, more stable system
- Built-in isolation transformer, high load adaptability
- AC/DC dual power supply backup

| | BD30KTR-MT | BD50KTR-MT | BD100KTR-MT | BD150KTR-MT | BD250KTR-MT | BD500KTR-MT |
|---|---|---|---|---|---|---|
| **AC (On-grid)** | | | | | | |
| Max. Output Power | 33kVA | 55kVA | 110kVA | 165kVA | 275kVA | 550kVA |
| Rated power | 30kW | 50kW | 100kW | 150kW | 250kW | 500kW |
| Rated Current | 43A | 72A | 144A | 216A | 361A | 722A |
| Max. Output Current | 48A | 80A | 159A | 238A | 397A | 794A |
| Rated Voltage | 400V, 3W + N + PE | | | | | |
| Operating Voltage Range | 320V ~ 460V | | | | | |
| Rated Frequency | 50Hz / 60Hz | | | | | |
| Power Factor | 1 leading ~ 1 lagging | | | | | |
| THDi | <3% | | | | | |
| **AC (Off-grid)** | | | | | | |
| Rated Voltage | 400V | | | | | |
| Rated Frequency | 50Hz / 60Hz | | | | | |
| Overload Capability | 110% (Continuous) | | | | | |
| THDu | < 1% linear; < 5% nonlinear | | | | | |
| **DC (Battery)** | | | | | | |
| Battery Voltage Range | 250V ~ 850V | 320V ~ 850V | 420V ~ 850V | 420V ~ 850V | 420V ~ 850V | 500V ~ 850V |
| Max.Current | 137A | 178A | 270A | 405A | 673A | 1128A |
| **Efficiency** | | | | | | |
| Max. Efficiency | 96.30% | 96.50% | 97.10% | 97.10% | 97.30% | 97.50% |
| **Communication** | | | | | | |
| Display | LCD | | | | | |
| BMS Communication | RS485, CAN | | | | | |
| EMS Communication | RS485, TCP/IP | | | | | |
| **Standard Compliance** | | | | | | |
| Certificates | CE, TÜV, CGC | | | | | |
| **General Data** | | | | | | |
| Dimensions (W x H x D) | 800 × 2050 x 800 mm | | | | 1200 × 2050 x 800 mm | 1600 × 2050 x 1050 mm |
| Weight | 605kg | 676kg | 936kg | 1057kg | 1582kg | 2665kg |
| Operation Temperature | -30° C ~ +55° C | | | | | |
| Cooling Method | Smart Air Cooling | | | | | |
| Protection Degree | IP21 | | | | | |
| Noise Emission | <75dB | | | | | |
| Max. Operating Altitude | 5000m (derating above 3000m) | | | | | |
| Relative Humidity | 0 ~ 95% (non-condensing) | | | | | |
| Transformer Ratio | 100 / 400 | 200 / 400 | 270 / 400 | 270 / 400 | 270 / 400 | 315 / 400 |
| Power Consumption | < 10W | | | | | |
| On/Off Grid Transfer | Automatic | | | | | |

# BD500-630kW-M

## Energy Storage Converter (Without Transformer)



### Intelligent Simple O&M

- Highest power density. Maximum efficiency: 98.7%
- Low power consumption fan, with intelligent temperature control system
- With grid-connected charging and discharging, off-grid independent inverter function

### Flexible Abundant configuration

- Wide battery voltage range, support multiple battery access
- Reactive power, active power adjustable
- Off-grid cold start function, support multi-machine parallel function
- Integrated design for easy transportation and integration
- Support RS485, CAN communication mode, can accept BMS instruction in real time

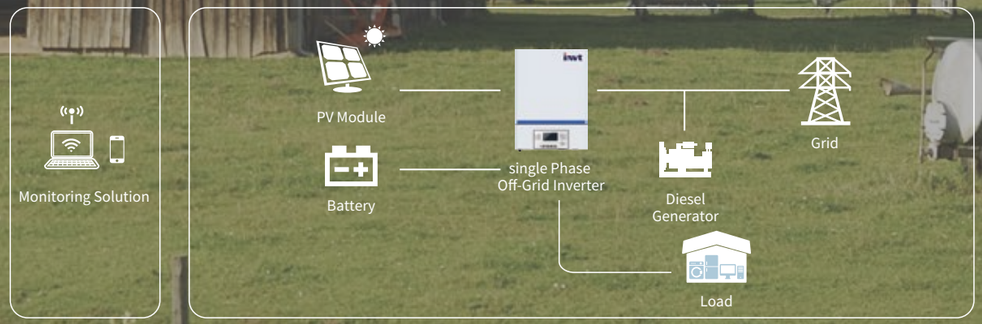
### Reliable Worry free

- High performance DSP, optimized control circuit design, high reliable system
- Patented control detection algorithm to ensure equipment failure diagnose
- AC/DC dual backup for auxiliary power supply

| | BD500KTR-M | BD630KTR-M |
|---|---|---|
| **AC (On-grid)** | | |
| Max. Output Power | 550kVA | 693kVA |
| Rated Power | 500kW | 630kW |
| Rated Voltage | 400V, 3W + PE | |
| Operating Voltage Range | 320V ~ 460V | |
| Rated Current | 722A | 909A |
| Max. Output Current | 800A | 1000A |
| Rated Frequency | 50Hz / 60Hz | |
| Power Factor | 1 leading ~ 1 lagging (Settable) | |
| THDi | <3% | |
| **AC (Off-grid)** | | |
| Rated Voltage | 400V | |
| Rated Frequency | 50Hz / 60Hz | |
| Overload Capability | 110% long-term | |
| THDu | ＜ 1% linear; ＜ 5% nonlinear | |
| **DC (Battery)** | | |
| Battery Voltage Range | 600V ~ 900V | |
| Max. Current | 935A | 1179A |
| **Efficiency** | | |
| Max. Efficiency | 98.70% | |
| **Communication** | | |
| Display | LCD | |
| BMS Communication | RS485, CAN | |
| EMS Communication | RS485, TCP/IP | |
| **Standard Compliance** | | |
| Certificates | CE, TÜV, CGC, L1HVRT | |
| **General Data** | | |
| Dimensions (W x H x D) | 1200 × 2050 x 800 mm | |
| Weight | 950kg | |
| Operation Temperature | -30° C ~ +55° C | |
| Cooling Method | Smart Air Cooling | |
| Protection Degree | IP21 | |
| Noise Emission | <70dB | |
| Max. Operating Altitude | 5000m (derating above 3000m) | |
| Relative Humidity | 0-95% (non-condensing) | |
| Topology | Transformerless | |
| Standby Power Consumption | ＜ 10W | |

# Off-Grid PV Solution

## Residential Off-grid PV Solution



# XN3-5kW（XN30IM-24 & XN50IM-48）

## Single Phase Off-Grid Solar Inverter

### Efficient
### Higher revenue

- 200% AC overload (100ms), withstand transient load impact.
- Wide voltage range and low startup voltage.
- Photovoltaic controller power upgrade with 5kW access.
- Wide MPPT voltage range to compatible with different types of crystalline silicon modules.
- Fast AC bypass charging.

### Intelligent
### Simple O&M

- Support USB/RS232/RS485/Bluetooth/Dry contact.
- Smart battery charger design, optimize battery performance.
- Remote monitoring and operation via PC or mobile phones

### Flexible
### Abundant configuration

- Multiple charging voltage levels for different batteries.
- Multiple operating modes: PV priority / grid priority / battery priority…
- Detachable LCD control module with multiple communications.
- Support non-linear load

| | XN30IM-24 | XN50IM-48 |
|---|---|---|
| Rated Power | 3kVA / 3kW | 5kVA / 5kW |
| **Input (AC)** | | |
| Max. input Voltage | 230Vac | |
| Selectable Voltage Range | 170Vac ~ 280Vac (for personal computers)<br>90Vac ~ 280Vac (for home appliances) | |
| Rated Frequency | 50Hz / 60Hz (auto-sensing) | |
| **Output (AC)** | | |
| AC Voltage Regulation(Batt. Mode) | 230Vac±5% | |
| Surge power | 6kVA | 10kVA |
| Overload Capability | ⩾ 130%,5s; 105%~130%,10s | |
| Effciency | 93% | |
| Transfer Time | 10ms (for personal computers); 20ms (for home appliances) | |
| Waveform | Pure Sine Wave | |
| **Battery** | | |
| Battery Voltage | 24Vdc | 48Vdc |
| Floating | 27Vdc | 54Vdc |
| Overcharge Protection | 33Vdc | 63Vdc |
| Battery reverse polarity protection | Fuse | |
| **Solar Charger & AC Charge** | | |
| Solar Charger Type | MPPT | |
| Maximum PV Array Power | 4kW | 5kW |
| MPP Range @ Operating Voltage | 120Vdc ~ 450Vdc | |
| Maximum PV Array Open Circuit Voltage | 500Vdc | |
| Maximum Charger Current | 100A | |
| **Protection** | | |
| Protection | AC short circuit protection, AC over current protection,<br>Output over voltage protection, Over temperature protection etc. | |
| **Communication** | | |
| Display | LCD | |
| Communication | USB / RS232 / RS485 / Bluetooth / Dry Contact | |
| **Standard Compliance** | | |
| Safety | CE | |
| **General Data** | | |
| Dimensions (W x H x D) | 300 x 400 x 115 mm | |
| Weight | 9kg | 10kg |
| Operating Temperature | -10° C ~ +50° C | |
| Storage Temperature | -15° C ~ +60° C | |
| Relative Humidity | 5%-95% (non-condensing) | |

# XN50PIII-48

## Single Phase Off-Grid Solar Inverter

### Efficient
### Higher revenue

- 200% AC output overload ability (100ms), withstand transient load impact
- Wide voltage range and low startup voltage
- Photovoltaic controller power upgrade to 5kW access
- Wide MPPT voltage range to compatible with different types of crystalline silicon modules
- Fast AC bypass charging

### Intelligent
### Simple O&M

- Support USB/RS232/RS485/Bluetooth
- Smart battery charger design for optimized battery performance
- Remote monitoring and operation via PC or mobile phones

### Flexible
### Abundant configuration

- Support 9 units inverters parallel
- Multiple charging voltage levels for different batteries
- Multiple operating modes: PV priority / grid priority / battery priority…
- Detachable LCD control module with multiple communications
- Support non-linear load

| | XN50PIII-48 |
|---|---|
| Rated Power | 5 kVA / 5 kW |
| **Input (AC)** | |
| Max. Input Voltage | 230 Vac |
| Selectable Voltage Range | 170Vac ~ 280Vac (for personal computers);<br>90Vac ~ 280Vac (for home appliances) |
| Frequency Range | 50 Hz / 60 Hz (auto sensing) |
| **Output (AC)** | |
| AC Voltage Regulation (Batt. Mode) | 230Vac±5% |
| Surge power | 10kVA |
| Overload Capability | ⩾ 150%, 5s; 110%~150%, 10s |
| Effciency | 90% |
| Transfer Time | 10ms (for personal computers); 20ms (for home appliances) |
| Waveform | Pure Sine Wave |
| **Battery** | |
| Battery Voltage | 48Vdc |
| Floating | 54Vdc |
| Overcharge Protection | 66Vdc |
| Battery Reverse Polarity Protection | FUSE |
| **Solar Charger and AC Charge** | |
| Solar Charger Type | MPPT |
| Maximum PV Array Power | 5kW |
| MPP Range@ Operating Voltage | 120Vdc ~ 430Vdc |
| Maximum PV Array Open Circuit Voltage | 450Vdc |
| Maximum Charger Current | 100A |
| **Protection** | |
| Protection | AC short circuit protection, AC over current protection,<br>Output over voltage protection, Over temperature protection etc. |
| **Communication** | |
| Display | LCD |
| Communication | USB / RS232 / RS485 / Bluetooth |
| **Standard Compliance** | |
| Safety | CE |
| **General Data** | |
| Dimensions (W x H x D) | 295 x 468 x 140 mm |
| Weight | 12kg |
| Operating Temperature | -10° C ~ +50° C |
| Storage Temperature | -15° C ~ +60° C |
| Relative Humidity | 5% ~ 95% (non-condensing) |

# XN80PA-48

## Single Phase Off-Grid Solar Inverter

### Efficient
### Higher revenue

- 200% AC overload (100ms), withstand transient load impact
- Wide voltage range and low startup voltage
- Wide MPPT voltage range to compatible with different types of crystalline silicon modules
- Fast AC bypass charging

### Intelligent
### Simple O&M

- Diverse communications: Support USB/RS232/RS485/WiFi/Dry Contact
- Remote monitoring and operation via PC or mobile phones

### Flexible
### Abundant configuration

- Support 6 units inverters parallel
- Selectable high power charging current
- Compatible to Utility Mains or generator input
- Removable Fan design
- Detachable LCD control module with multiple communications

| | XN80PA-48 |
|---|---|
| Rated Power | 8kVA / 8kW |
| **Input (AC)** | |
| Rated Input Voltage | 230Vac |
| Selectable Voltage Range | 170Vac ~ 280Vac (for personal computers); 90Vac ~ 280Vac (for home appliances) |
| Rated Frequency | 50Hz / 60Hz (auto-sensing) |
| **Output (AC)** | |
| AC Voltage Regulation (Batt. Mode) | 230Vac±5% |
| Surge power | 16kVA |
| Overload Capability | ⩾ 205%,100ms; ⩾ 150%,5s;110%~150%,10s |
| Effciency | 93% |
| Transfer Time | 10ms (for personal computers); 20ms (for home appliances) |
| Waveform | Pure Sine Wave |
| **Battery** | |
| Battery Voltage | 48Vdc |
| Floating | 54Vdc |
| Overcharge Protection | 66Vdc |
| Battery reverse polarity protection | Fuse |
| **Solar Charger & AC Charge** | |
| Solar Charger Type | MPPT |
| Maximum PV Array Power | 8kW |
| MPP Range @ Operating Voltage | 90Vdc ~ 450Vdc |
| Maximum PV Array Open Circuit Voltage | 500Vdc |
| Maximum Charger Current | 150A |
| **Protection** | |
| Protection | AC short-circuit protection, AC over-current protection,<br>Output over-voltage protection, Over-temperature protection etc. |
| **Communication** | |
| Display | LCD |
| Communication | USB / RS232 / RS485 / WiFi / Dry Contact |
| **Standard Compliance** | |
| Safety | CE |
| **General Data** | |
| Dimensions (W x H x D) | 432.5 x 553.6 x 147.4 mm |
| Weight | 18.4kg |
| Operating Temperature | -10° C ~ +50° C |
| Storage Temperature | -15° C ~ +60° C |
| Relative Humidity | 5%-95% (non-condensing) |

# STICK LOGGER

GPRS / WiFi / Ethernet


**Plug and play**
No extra power supply is required.

**Independent module**
Protecting internal parts of inverter.

**Waterproof design**
Resistant to bad weather.

**External design**
External indicator lights, ensuring collection status at a glance; easy to replace faulty equipment.

| | LS4G-5 | LS4G-4 | LSW-5 | LSW-3 | LSG-3 | LSE-3 |
|---|---|---|---|---|---|---|
| Remote Communication Interface | 4G | 4G | 2.4G WiFi | 2.4G WiFi | GPRS | LAN |
| GNSS | <20m | —— | —— | —— | —— | —— |
| Antenna | Internal Antenna | External Antenna | Internal Antenna | External Antenna | External Antenna | —— |
| Data Interface | RS485 / RS232 / TTL | | | | | |
| Working Voltage | DC 5-12V | | | | | |
| Working Power | 3.5W | 3.5W | 1.5W | 1.5W | 3W | 1W |
| SIM Card | Chip Card / MicroSIM | | —— | —— | Chip Card / MicroSIM | —— |
| Memory | 8M Flash | 8M Flash | 8M Flash | 2M Flash | 2M Flash | 2M Flash |
| Working Temperature | —40°C～ +85°C | | | | | |
| Working Humidity | ＜ 90% (No Condensation) | | | | | |
| No. of Connections | One | | | | | |
| Serial Communication Rate | 9600bps (1200—115200bps Configurable) | | | | | |
| Data Acquisition Interval | Default: 5 mins (1-15 mins Configurable) | | | | | |
| User Configuration | BT / APP | APP | BT / APP / Web | APP / Web | APP / BT | Web / APP |
| Firmware Upgrade | BT / Remote | Remote | BT / Remote / Web | Remote / Web | Remote | Remote / Web |
| Real-time Control | √ | | | | | |
| Data Resuming | √ | | | | | |
| Power-off Reminder | √ | √ | √ | —— | —— | —— |



# DIN-RAIL LOGGER

GPRS / WiFi / Ethernet

**Standard DIN-Rail Mount**
Suitable for 35mm DIN-Rail mount.

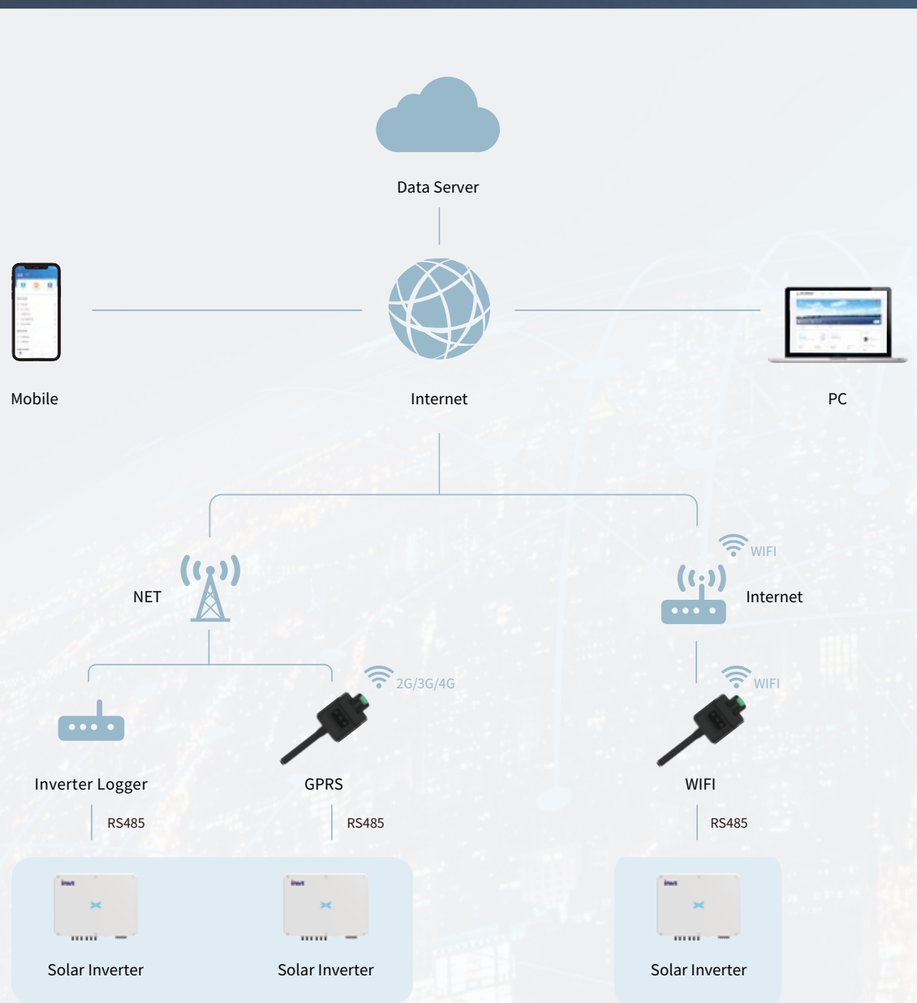
**Data Resuming**
Ensure data integrity.

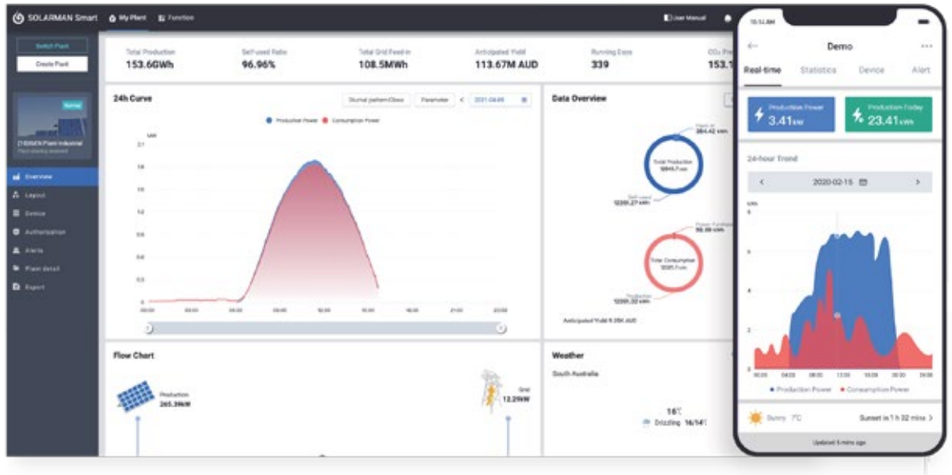
**Remote Upgrade**
Remote upgrade and system debugging, easy for O&M.

**Alert Notification**
Real-time alerts with timely notification, ensuring fast troubleshoot.

| | LD4G-2 | LDG-2 | LDW-1 |
|---|---|---|---|
| Remote Communication Interface | 4G | GPRS | WiFi |
| Working Frequency | LTE-FDD, LTE-TDD, WCDMATD-SCDMA CDMA, GSM | GSM850, EGSM900, DCS 1800, PCS1900MHz | 2.142GHz ~ 2 484GHz |
| No.of Connections | 1-16 | 1-16 | 1-10 |
| Ethernet | - | - | 10/100M (Adaptive Network) |
| Working Voltage | DC 4.7-15V | DC 4.7-15V | DC 4.7-15V |
| Working Power | 3.8W | 3W | 1W |
| Local Communication | RS485/RS422/RS232 | | |
| Serial Communication Rate | 1200-115200bps Configurable | | |
| Data Uploading Interval | Default: 5 mins (1-15 mins Configurable) | | |
| Memory | 2M Fash (51 2K-1 6M Optiona) | | |
| User Configuration | AT+Instruction Set, Remote Server | AT+Instruction Set, Remote Server (BT3.0+EDR Configuration&Access) | AT+Instruction Set, Remote Server |
| SIM Card | MicroSIM | MicroSIM | - |
| Antenna | 4G Small Antenna (Sucker Antenna Optional) | GPRS Small Antenna (Sucker Antenna Optional) | GPRS Small Antenna (Sucker Antenna Optional) |
| Working Temperature | -40°C ~+85°C (Battery Version: -20°C ~ +60°C ) | -40C ~+85C (Battry Version: -20°C ~ +60°C ) | -40°C ~ +85°C |
| Working Humidity | < 90% (non-condensation) | | |
| Dimension (W x H x D) | 76 x 91 x18 mm | | |
| Installation Method | 35mm DIN-Rail | | |

# Monitoring Solution




# Monitoring Platform

## SOLARMAN Business

PV Monitoring and Management Platform.

### For Device Manufacturer:

- Device Control and Firmware Upgrade
- Data Processing
- Authorization Management
- Batch Task
- Device Classification

### For Service Provider:

- Plentiful Information
- Intelligent AI Diagnosis
- Most Cost-effective Virtual Weather Station
- Simple Drag-and-Drop
- Intelligent and Intuitive Alerts

## SOLARMAN Smart

A brand new smart energy management application, which is specially designed for global users.

### Advantage:

- All-round Monitoring
- Create a Plant within 1 min
- Timely Alert Report
- Intuitive System Layout
- Flexible Plant Management

For Business

For Home

## **RESIDENTIAL** CASE

5kW Solar System in Brazil
(MG5KTL)

6kW Solar System in Melbourne
(MG6KTL)

10kW Solar System in Thailand
(MG5KTL)

8kW Solar System in Mexico
(MG2KTL, MG6KTL)

4kW Solar System in Sri Lanka
(MG4KTL)

3kW Solar System in Croatia
(MG3KTL)

5kW Solar System in Shandong, China
(MG5KTL)

16MW Solar System in Shanxi, China
(MG5KTL)





## **RESIDENTIAL** CASE

5kW Solar System in Israel
(XN50PIII-48)


5kW/5kWh Solar System in Ireland
(BD5KTL-RL1)


5kW/10kWh Solar System in Taiwan, China
(BD5KTL-RL1)


10kW/10kWh Solar System in Philippines
(BD5KTL-RL1)

6kW Solar System in Guangdong, China
(MG6KTL-2M)

## **COMMERCIAL** CASE

**COMMERCIAL** CASE

800kW Rooftop PV Plant in Shanxi, China
(XG110KTR)

630kW/1000kWh ESS for the 2022 Beijing Winter Olympics
(BD630KTR-M)

258kW Rooftop PV Plant in Fujian, China
(XG110KTR，BG30KTR)


250kW/250kWh ESS for the 2022 Beijing Winter Olympics
(BD250KTR-MT)

5.916MW Rooftop PV Plant in Hubei, China
(XG100KTR, XG50KTR)


15kW ESS+EV Project in Henan, China
(XN50PIII-48)


13.86MW Rooftop PV Plant in Hubei, China
(XG136KTR-X)

110kW PV Plant in Jilin, China
(XG110KTR)

1MW Rooftop PV Plant in  Türkiye
(XG110KTR)

522kW Rooftop PV Plant in Zhejiang, China
(XG110KTR, XG60KTR, XG50KTR)

1.1MW Rooftop PV Plant in Guangdong, China
(XG110KTR，XG30KTR)