

# XPI Series Hybrid Charger & Inverter



## XPI 0.5kVA~7kVA

### Features

- MPPT controller, maximize utilization of solar panels
- Integrated design with controller, inverter and transformer
- Pure sine wave output
- Output isolated transformer, safe and stable
- Mains/diesel generator input interface (optional)
- Excellent overload capacity
- Suitable for all sorts of electrical appliances
- Intelligent battery management function
- Complete protections
- LCD display + LED status indicator

### Description

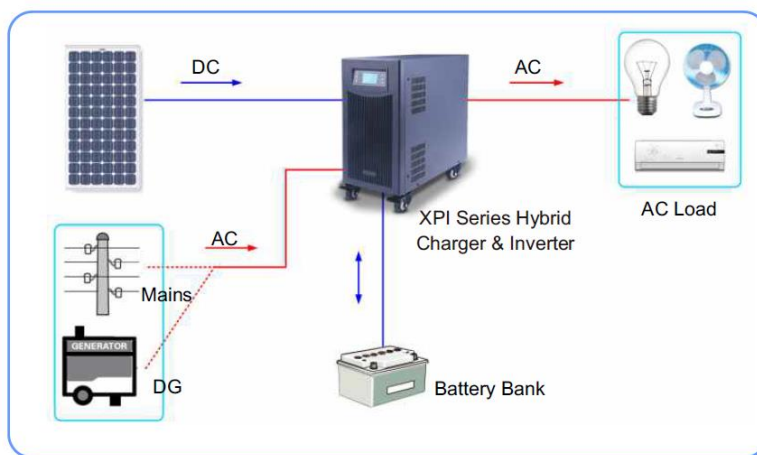
- XPI series single-phase off-grid inverter consist of 3 functional modules: solar controller, pure sine wave inverter and insulated transformer. The controller adapts MPPT technology and intelligent battery management design which is very efficient and smart; integrated pure sine wave inverter and low frequency isolated transformer makes it with excellent overload performance, suitable for a variety of electrical appliances. It supports mains/generator input, take advantages of old diesel generators, saving initial investment and operation maintenance cost.
- XPI series is mainly applied in remote animal husbandry, fishery area and big family to solve people's electricity problems.

#### Optional Models:

**XPI 0.5kVA-D M L**

① ② ③ ④ ⑤

- ① Single-phase off-grid solar inverter
- ② Rated capacity
- ③ U: Utility power input; D: Diesel generator input
- ④ M: MPPT charge controller; P: PWM charge controller
- ⑤ S: Internal battery; L: External battery



## Technical data

| Model                 | XPI _._KVA-DMS/DML/ DPS/DPL/UMS/UML/UPS/UPL |        |        |             |        |        |        |        |        |        |
|-----------------------|---------------------------------------------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|
|                       | 0.5kVA                                      | 0.7kVA | 1.0kVA | 1.5kVA      | 2.0kVA | 3.0kVA | 4.0kVA | 5.0kVA | 6.0kVA | 7.0kVA |
| Output power (kW)     | 0.4                                         | 0.6    | 0.8    | 1.2         | 1.5    | 2.5    | 3.0    | 4.0    | 5.0    | 6.0    |
| Battery voltage (VDC) | 24                                          |        |        | 48          |        |        | 96     |        |        |        |
| Battery configuration | 200AH/12V*2pcs                              |        |        | 200AH/12V*4 |        |        | \      |        |        |        |

### Solar Charger Parameters

|                                       |             |  |        |  |         |  |
|---------------------------------------|-------------|--|--------|--|---------|--|
| Charger type                          | PWM/MPPT    |  | MPPT   |  | MPPT    |  |
| Rated Input power (W)                 | 900/1440    |  | 2880   |  | 5760    |  |
| PV Input voltage (V)                  | 30~50/30~90 |  | 70~150 |  | 150~300 |  |
| Recommended Input voltage (VDC)       | 36/60       |  | 90     |  | 180     |  |
| Max. input current (A)                |             |  | 50     |  |         |  |
| Max. output current (A)               |             |  | 50     |  |         |  |
| Battery float voltage (V)             | 27.2        |  | 54.5   |  | 109     |  |
| Battery equalizing charge voltage (V) | 28.8        |  | 57.6   |  | 115.2   |  |

### AC Charger Parameters

|                                      |                     |  |
|--------------------------------------|---------------------|--|
| City power input voltage range (Vac) | 110/220/230±25%     |  |
| City power input frequency (Hz)      | 50/60±3%            |  |
| AC charging current (A)              | Rated: 10, Max.: 15 |  |

### Inverter Parameters

|                           |                                          |      |
|---------------------------|------------------------------------------|------|
| Inverter output voltage   | 110±3%; 220±3% (or other output voltage) |      |
| Inverter output frequency | 50/60±3%                                 |      |
| Efficiency                | >80%                                     | >85% |
| Overload capacity         | 105~120%, 30s; 120~150%, 10s; >150%, 5s  |      |
| Crest factor              | 3                                        |      |
| Output wave               | Pure sine wave                           |      |

### General Parameters

|                                  |                                                                                                  |      |      |             |    |    |             |    |    |    |
|----------------------------------|--------------------------------------------------------------------------------------------------|------|------|-------------|----|----|-------------|----|----|----|
| Display                          | LCD+LED                                                                                          |      |      |             |    |    |             |    |    |    |
| Display content                  | PV status, battery capacity, AC input voltage, AC output voltage, load, running status           |      |      |             |    |    |             |    |    |    |
| Complete protections             | DC & AC overload, under-voltage, SPD, short-circuit, overcharge, overdischarge, over-temperature |      |      |             |    |    |             |    |    |    |
| Cooling method                   | Forced air cooling                                                                               |      |      |             |    |    |             |    |    |    |
| Communication                    | RS232 (optional)                                                                                 |      |      |             |    |    |             |    |    |    |
| Noise emission [dB (A)]          | <60 (at 1 meter)                                                                                 |      |      |             |    |    |             |    |    |    |
| Operating temperature range (°C) | -20~+50 (>50°C derating)                                                                         |      |      |             |    |    |             |    |    |    |
| Storage temperature range (°C)   | -25~+70                                                                                          |      |      |             |    |    |             |    |    |    |
| Relative humidity in operation   | 0~90% (non condensing)                                                                           |      |      |             |    |    |             |    |    |    |
| Max. operating altitude (m)      | 5000m (>1000m, derating)                                                                         |      |      |             |    |    |             |    |    |    |
| Dimension [bat. in (D*W*H mm)]   | 580*560*534                                                                                      |      |      | 580*560*857 |    |    | \           |    |    |    |
| Dimension [bat. out (D*W*H mm)]  | 420*145*215                                                                                      |      |      | 500*195*345 |    |    | 500*240*490 |    |    |    |
| Weight [bat. in (kg)]            | 26.5                                                                                             | 27.5 | 28.5 | 45          | 46 | 47 | \           |    |    |    |
| Weight [bat. out (kg)]           | 8                                                                                                | 9    | 10   | 11          | 19 | 22 | 35          | 40 | 45 | 54 |

Data may change without any notice.