

Solar Pumping Controller

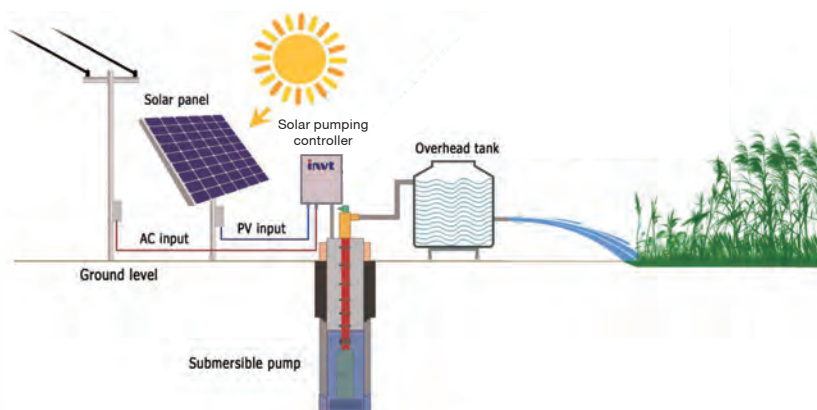
GD100-PV & BPD & SPC



Company Profile

INVT, established in 2002, is committed to be the globally leading and respected provider for products and services of industrial automation and electric power.

Manufacture controller, PLC, HMI, Servo and UPS, widely applied the industries of solar pump, lifting, mining, metallurgy, textiles, machine tools, chemical, plastics, oil&gas, municipal, cement, power, etc.



Product Introduction



GD100-PV

1AC 220V 0.4~2.2kW / 3AC 220V 1.5~7.5kW / 3AC 380V 0.75~200kW

1. Advanced MPPT control technology
2. Automatic start only after connecting to solar panel without parameter setting
3. Models(≤ 2.2 kW) support boost module
4. Support the GPRS module for optional
5. Solution for automatic switch
6. Support cabinet product for IP54



BPD

1AC/3AC 220V 0.75~4kW, 3AC 380V 2.2~5.5kW (AC input is available)

1. Support multiple types of motors
2. Protection level: IP65
3. Support grid electricity input and diesel engine input
4. Low start voltage and wide input voltage range
5. Provide lighting protection, overvoltage, over current, overload protection function etc
6. Optional water level detection function



SPC

3AC 220V 2.2kW, 3AC 380V 4kW/7.5kW (DC input only)

1. Advanced MPPT function
2. Protection level: IP65 or IP00 (for SKD)
3. Integrated with GPRS
4. Optional DC switch
5. Multiple protection functions: dry running, lower sunshine, lightning protection, etc
6. Support multiple types of motors

Type Selection

GD100 – 5R5G – 4 5 – PV

① ② ③ ④ ⑤

| Field | Sign | Description | Remarks |
|-------|------|-------------------------|--|
| GD100 | ① | Product abbreviation | GD100 is short for Goodrive100 |
| 5R5G | ② | Rated power + Load type | 5R5G: 5.5kW G: Constant torque load |
| 4 | ③ | Voltage degree | 4: AC 3PH 380V (-15%)–440(+10%) 2: AC 3PH 220V (-15%)–240(+10%) S2: AC 1PH 220V (-15%)–240(+10%) SS2: AC 1PH input/output 220V (-15%)–240(+10%) |
| 5 | ④ | Protection level | 5—IP54 The protection level of a standard inverter is IP20, but this field is not displayed. |
| PV | ⑤ | Industrial code | PV stands for solar pumping. |

BPD – XKX – TN – AC

① ② ③ ④


| Field | Sign | Description | Remarks |
|-------|------|----------------------|--|
| BPD | ① | Product abbreviation | Name of the PV pumping inverter series |
| XKX | ② | AC output power | Rated AC output power 1500W: 1K5 5000W: 005 |
| TN | ③ | Technical type | TR: 3PH TN: 1PH/3PH |
| AC | ④ | Extension code | The default is a standard model; AC indicates that AC input is supported; and ACS indicates that AC input is provided and a DC switch is configured. |

SPC XKX TR 4 6

① ② ③ ④ ⑤

| Field | Sign | Description | Remarks |
|-------|------|----------------------|--|
| SPC | ① | Product abbreviation | Name of the PV pumping inverter series |
| XKX | ② | AC output power | Rated AC output power 2200W: 2K2 |
| TR | ③ | Technical type | TR: three-phase output |
| 4 | ④ | Output voltage | 2: 220V 4: 380V |
| 6 | ⑤ | Protection level | 0: IP00 6: IP65 |

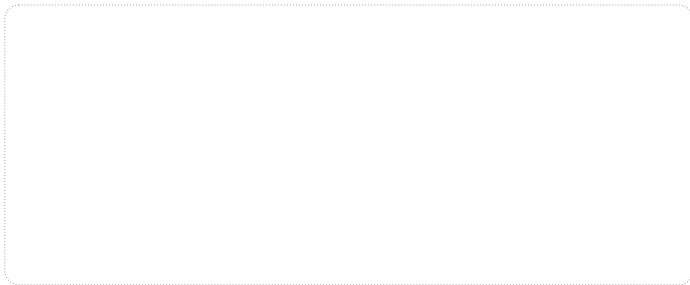
Technical Specification

| Product series | |  | | |
|--|--|---|---|--|
| | | GD100-PV | BPD | SPC |
| Product features | | | | |
| Basic characteristics | Input voltage and power(kW) | 1AC 220V 0.4~2.2kW 3AC 220V 1.5~7.5kW 3AC 380V 0.75~200kW | 1AC 220V~240V: 0.75~2.2kW 3AC 380V: 2.2~5.5kW | DC 450V(Max.): 2.2kW DC 800V(Max.):4kW/7.5kW |
| | Recommended MPP voltage range | --SS2/-S2/-2: 200~400V -4: 300~750V | 0.75kW(220V): 80~400V 1.5~4kW(220V): 100~400V 2.2~5.5kW(380V): 220~750V | 220V: 200~400V 380V: 300~750V |
| | Support motor type | AM | AM | AM,SM,BLDC |
| | Control mode (Asynchronous motor) | VF/SVC | VF | VF/SVC |
| | Overload capability | 150% of rated current: 1 minute 180% of rated current: 10 seconds 200% of rated current: 1 second | 150% of rated current: 1 minute 180% of rated current: 10 seconds 200% of rated current: 1 second | 120% of rated current: 1 minute 150% of rated current: 10 seconds |
| Structure characteristics | Installation | Wall mounting Rail mounting Flange mounting | Wall mounting | Wall mounting |
| | Degrees of protection | IP20/IP54 cabinet | IP65 | IP00/IP65 |
| | Cooling method | Air cooling | Natural cooling | Natural cooling |
| Hardware configuration characteristics | Analog input | 2 | / | / |
| | Digital input | 4 | 3 | 2 |
| | Analogue output | 2 | / | / |
| | Relay output | 2 | / | 1 |
| | Communication | RS485 | RS485 | RS485 |
| | DC input | Standard | Standard | Standard |
| | AC input | Standard | Standard | / |
| | DC/AC input Automatically switch | Optional | Standard | / |
| | LED keyboard | Built-in LED keyboard | External LED keyboard | External LED keyboard |
| | GPRS moduel | Optional | Optional | Built-in |
| Technical features | MPPT efficiency | 99% | 99% | 99% |
| | Water level control | ✓ | ✓ | ✓ |
| | Automatic Hibernation and start function | ✓ | ✓ | ✓ |
| Protection | Lower-sunshine alarm, Overload/Lower-load protection, Over current protection, Over voltage protection, Water level protection, etc. | | | |
| Certification | CE | CE | / | |

Application



Your trusted industry automation solution provider



Service line: 86-755-23535967 E-mail: overseas@invt.com.cn Website: www.invt.com

SHENZHEN INVT ELECTRIC CO.,LTD. INVT Guangming Technology Building, Songbai Road, Matian, Guangming District, Shenzhen, China

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|-------------------------------|--|---------------------------------------|----------------------------|-----------------------------------|
| Industrial Automation: | • Frequency AC Drive | • Servo & Motion Control | • Motor & Electric Spindle | • PLC |
| | • HMI | • Intelligent Elevator Control System | • Traction Drive | |
| Electric Power: | • SVG | • Solar Pump Controller | • UPS | • Online Energy Management System |
| | • New Energy Vehicle Electric Control System | | | |

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66003-00211 20200427(V1.0)