



Product Service

# Attestation of Conformity

No. N8 14 10 83373 004

**Holder of Certificate:** **JIANGSU GOODWE POWER SUPPLY TECHNOLOGY CO., LTD.**

No. 189 Kun Lun Shan Road  
Suzhou New District  
215163 Suzhou, Jiangsu  
PEOPLE'S REPUBLIC OF CHINA

**Product:** **Converter  
PV Grid-connected Inverter**

This Attestation of Conformity is issued on a voluntary basis according to the Low Voltage Directive 2006/95/EC relating to electrical equipment designed for use within certain voltage limits. It confirms that the listed equipment complies with the principal protection requirements of the directive. It refers only to the particular sample submitted for testing and certification. See also notes overleaf.

**Test report no.:** 704091413001-00

**Date,** 2014-10-29

  
( Zhengdong Ma )



**CE** After preparation of the necessary technical documentation as well as the EC conformity declaration the required CE marking can be affixed on the product. Other relevant directives have to be observed.

Page 1 of 3



Product Service

## Attestation of Conformity

No. N8 14 10 83373 004

### Model(s):

**GW10K-DT, GW12K-DT, GW15K-DT,  
GW17K-DT, GW20K-DT, GW25K-DT**

### Parameters:

Vmax PV:	1000 Vdc
MPPT voltage range:	260 ... 850 Vdc
Rated DC voltage:	640 Vdc
Max. DC current:	22/11 A <sub>dc</sub> (GW10K-DT, GW12K-DT) 22/22 A <sub>dc</sub> (GW15K-DT, GW17K-DT, GW20K-DT) 27/27 A <sub>dc</sub> (GW25K-DT)
I <sub>sc</sub> PV:	27/20 A <sub>dc</sub> (GW10K-DT, GW12K-DT) 27/27 A <sub>dc</sub> (GW15K-DT, GW17K-DT, GW20K-DT) 32/32 A <sub>dc</sub> (GW25K-DT)
Rated grid voltage:	3/N/PE ~ 400/230V
Rated grid frequency:	50 Hz
Max. output current:	17 A <sub>ac</sub> (GW10K-DT) 19 A <sub>ac</sub> (GW12K-DT) 25 A <sub>ac</sub> (GW15K-DT, GW17K-DT) 30 A <sub>ac</sub> (GW20K-DT) 37 A <sub>ac</sub> (GW25K-DT)
Rated AC power:	10 kW (GW10K-DT) 12 kW (GW12K-DT) 15 kW (GW15K-DT) 17 kW (GW17K-DT) 20 kW (GW20K-DT) 25 kW (GW25K-DT)
Power factor range:	1@nominal power (adj: 0,9cap...0,9ind)
Operation temperature range:	-25°C ... +60°C
Protective class:	I
Ingress protection:	IP65
Overvoltage category:	III(Mains), II(PV)

### Tested according to:

EN 62109-1:2010  
EN 62109-2:2011



# Attestation of Conformity

## No. N8 14 10 83373 004



Product Service

### License conditions:

1. When installing the equipment, all requirements of the mentioned standards must be fulfilled.
2. In order to protect the installation against electrical and fire hazard, all branch circuits in an installation, switchgear, cables etc., must be short-circuit and over-current protected according to the national/international regulations.

3. When install PV generation system, double/reinforced insulation cable required with mechanical protection.

Recommended conductor cross-section area and installation method, refer to installation manual:

Recommended PV input cables: copper, PV+&PV-, 2,5 mm<sup>2</sup> - 4 mm<sup>2</sup>@Max. 60°C ambient temperature.

Recommended AC output cables: copper, L1, L2, L3, N, PE, cross-section refer to below table

Model	GW10K-DT	GW12K-DT	GW15K-DT	GW17K-DT	GW20K-DT	GW25K-DT
cross-section(mm <sup>2</sup> )	4-10	4-10	4-10	4-10	6-10	6-10

All type of PV inverters with operating time of the type C circuit breaker or fuse is less than 5 seconds, wire installation method B2 according to EN 60204-1:2006, annex D: cable in conduit cable trunking system. Maybe use H07RN-F (cord designation 60245 IEC 66) for an ambient temperature of up to 40°C or less and use 90°C rough cable for ambient temperature between 40°C and 60°C. If any higher temperature environment used or for decrease the power loss in wire runway, it shall increase the conductor current carrying capacity and recalculation.

4. Maximum inverter backfeed current from grid to the array is 0A based on test/circuit topology analysis and manufacturer's declaration. And due to design, more than three strings can be connected to inverter, so backfeed current can form others strings to the fault string when short-circuit occurs, PV fuse need to be installed in end-system according to system requirement based on solar irradiation, local temperature and environment, e.g. ratings 1000V, 1.5Isc.

5. Serial – RS485 are used for telecommunication interface ports with circuitry intended for connection to a Network Environment 0 per manufacturer's instruction manual, according to IEC TR 62102.

RS 485 circuit is classed to be as SELV, Only PELV or SELV voltages may be connected at RS 485 terminals.

6. The inverter is intended to be used with appropriate PV-generator, switchgear, SPDs, combiner feeder box, distribution board, electrical protection components and other device to form complete end systems. Compliance with safety regulations depends upon installing and configuring inverter correctly, including using the specified emergency stop device adjacent to solar inverter. The unit must be installed only by professional assemblers who are familiar with requirements for safety and EMC. The assembler is responsible for ensuring that the end product or system complies with all the relevant laws in the country where it is to be used. Refer to instruction manual.

7. Additional equipment connected to the inverter must comply with the respective IEC, EN or ISO standards (e.g. IEC/EN 60950 for data processing equipment, IEC/EN 61439 for switchgear).

8. To allow maintenance of PV inverter, means of isolating the PV inverter from the DC side and the AC side shall be provided at the end-use application.

9. For safety reasons, install the emergency stop devices at station adjacent to solar inverter in the end-system. Pressing the stop function on the control panel of the inverter does generate an emergency stop and separate the inverter from dangerous potential.

10. An additional RCD, type B according to IEC 60755, amendment 2 which is located between the inverter and the mains, may be provided for fault protection by automatic disconnection of supply in the end-use application with the agreement of local network operator.

11. Island operation can be detected independently for individual unit. For multiple units operation, the automatic disconnection device should receive break commands via an interface from another protection device with equivalent island network detection. A break command must trigger a break within 0.2 s. The protection device issuing the break signal and the interface must also fulfill the functional safety requirements.

12. Not intended for use with connection to plug socket!