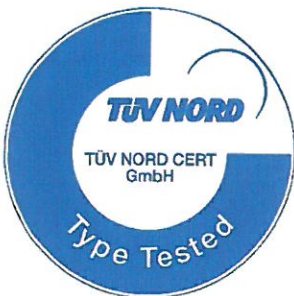


# CERTIFICATE

## Shenzhen Megarevo Technology Co., Ltd.

4th Floor, Block 2, INVT Guangming Technology Building  
Shutianpu Community, Matian Neighborhood  
Guangming New District, Shenzhen, 518106, P.R. China

is authorized to provide the product(s) mentioned below with the mark as illustrated:



Description of product(s) (details see Annex 2):

Hybrid Solar Inverter

It is certified by TÜV NORD CERT GmbH that the product(s) described above has(have) been assessed according to the certification program mentioned below and found in compliance with the requirements of below specified certification fundamental(s). This certification is based on evaluation results as documented in test report(s) referenced below and production site(s) audit results as documented in factory inspection report(s) referenced in Annex 1. This certificate is valid in conjunction with these quoted report(s).

Certification program:	P31-VA-01 Rev. 01 06.18	
Certification fundamental(s):	IEC 62109-1:2010; IEC 62109-2:2011	
Registered no.:	44 780 20 406749 - 023	
Manufacturer:	See Annex 1	
Test report no.:	492011366.001	Valid from: 2020-01-21
File no.:	SHV04096/19-01	Valid until: 2025-01-20

*Marvin Peng*

TÜV NORD CERT GmbH  
Certification Body  
Energy Storage System

Essen, 2020-01-21

# ANNEX

Annex 1, Page 1 of 1

**to Certificate registration no. 44 780 20 406749 - 023**

**Manufacturer(s):**

Manufacturer :

**Yanluo branch of INVT Solar Technology (Shenzhen) Co., Ltd.**  
No 3, Hongyan Road, Yanchuan Community, Yanluo Neighborhood  
Bao'an District, Shenzhen, 518105, P.R. China

Factory inspection report no.:

862010470.001

**Remark:**

Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

A handwritten signature in blue ink that reads "Marvin Peng".

# ANNEX

Annex 2, Page 1 of 7

to Certificate registration no. 44 780 20 406749 - 023

**Description of product(s):**

Model type .....	R3KL1		
General information			
Safety class.....	Class II	Relative humidity .....	0-95%
IP grade .....	IP65	Altitude .....	2000m
Type of Isolation.....	Non Isolated	Number of DC connection:	2 PV&1 Battery
Firmware [DSP / MCU] .....	V1.01.01	LCD [version] .....	V1.00.01
Weight.....	25kg	Size (W x D x H) [mm] .....	550×520×200
Operating temperature.....	-25-+60°C (> 45 derating)		
DC input(PV)			
Max. input voltage.....	500Vd.c.	Isc .....	17.5*2 Ad.c.
MPP Voltage Range .....	125-500Vd.c.	MPP Full Power Voltage Range:	150-500Vd.c.
Max. Input Current .....	14Ad.c.	MPPT tracking .....	2
Max. input Power .....	4.6kW	-	-
Battery parameter			
Battery Rated Voltage .....	48Vd.c.	Battery Voltage Range .....	40-58Vd.c.
Max. Charging Current .....	95 Ad.c	Max. Discharging Current .....	62.5 Ad.c
Max. Charging Power .....	5kW	Max. Discharging Power .....	3kW
AC output (On-grid)			
Max. Output Apparent Power .....	3kVA	Max. Output Current .....	13Aa.c.
Rated voltage .....	230Va.c.	Rated Frequency .....	50/60Hz
Power Factor cosφ [λ] .....	[-1,1]	-	-
AC output (Back-up)			
Max. Output Apparent Power .....	3kVA	Max. Output Current .....	13Aa.c.
Rated voltage.....	230Va.c.	Rated Frequency .....	50/60Hz

*Marvin Peng*

# ANNEX

Annex 2, Page 2 of 7

to Certificate registration no. 44 780 20 406749 - 023

Model type .....	R3K6L1		
General information			
Safety class.....	Class II	Relative humidity .....	0-95%
IP grade .....	IP65	Altitude .....	2000m
Type of Isolation.....	Non Isolated	Operating temperature.....	-25-+60°C (> 45 derating)
Firmware [DSP / MCU] .....	V1.01.01	LCD [version] .....	V1.00.01
Weight.....	25kg	Size (W x D x H) [mm] .....	550×520×200
Number of DC connection:	2 PV&1 Battery		
DC input(PV)			
Max. input voltage.....	500Vd.c.	Isc .....	17.5*2 Ad.c.
MPP Voltage Range .....	125-500Vd.c.	MPP Full Power Voltage Range:	150-500Vd.c.
Max. Input Current .....	14Ad.c.	MPPT tracking .....	2
Max. input Power .....	4.6kW	-	-
Battery parameter			
Battery Rated Voltage .....	48Vd.c.	Battery Voltage Range .....	40-58Vd.c.
Max. Charging Current .....	95 Ad.c	Max. Discharging Current .....	76.6 Ad.c
Max. Charging Power .....	5kW	Max. Discharging Power .....	3.6kW
AC output (On-grid)			
Max. Output Apparent Power ....	3.6kVA	Max. Output Current .....	16Aa.c.
Rated voltage.....	230Va.c.	Rated Frequency .....	50/60Hz
Power Factor cosφ [λ].....	[-1,1]	-	-
AC output (Back-up)			
Max. Output Apparent Power ....	3.6kVA	Max. Output Current .....	16Aa.c.
Rated voltage.....	230Va.c.	Rated Frequency .....	50/60Hz

*Marvin Peng*

# ANNEX

Annex 2, Page 3 of 7

to Certificate registration no. 44 780 20 406749 - 023

Model type .....	R4KL1		
General information			
Safety class.....	Class II	Relative humidity .....	0-95%
IP grade.....	IP65	Altitude .....	2000m
Type of Isolation.....	Non Isolated	Operating temperature.....	-25-+60°C (> 45 derating)
Firmware [DSP / MCU] .....	V1.01.01	LCD [version] .....	V1.00.01
Weight.....	25kg	Size (W x D x H) [mm] .....	550×520×200
Number of DC connection:	2 PV&1 Battery		
DC input(PV)			
Max. input voltage.....	500Vd.c.	Isc .....	17.5*2 Ad.c.
MPP Voltage Range .....	125-500Vd.c.	MPP Full Power Voltage Range:	150-500Vd.c.
Max. Input Current .....	14Ad.c.	MPPT tracking .....	2
Max. input Power .....	6kW	-	-
Battery parameter			
Battery Rated Voltage .....	48Vd.c.	Battery Voltage Range .....	40-58Vd.c.
Max. Charging Current .....	95 Ad.c	Max. Discharging Current .....	83.3 Ad.c
Max. Charging Power .....	5kW	Max. Discharging Power .....	4kW
AC output (On-grid)			
Max. Output Apparent Power .....	4kVA	Max. Output Current .....	17.4Aa.c.
Rated voltage.....	230Va.c.	Rated Frequency .....	50/60Hz
Power Factor cosφ [λ].....	[-1,1]	-	-
AC output (Back-up)			
Max. Output Apparent Power .....	4kVA	Max. Output Current .....	17.4Aa.c.
Rated voltage.....	230Va.c.	Rated Frequency .....	50/60Hz

*Marvin Peng*

# ANNEX

Annex 2, Page 4 of 7

to Certificate registration no. 44 780 20 406749 - 023

Model type .....	R4K6L1		
General information			
Safety class.....	Class II	Relative humidity .....	0-95%
IP grade.....	IP65	Altitude .....	2000m
Type of Isolation.....	Non Isolated	Operating temperature.....	-25+60°C (> 45 derating)
Firmware [DSP / MCU] .....	V1.01.01	LCD [version] .....	V1.00.01
Weight.....	25kg	Size (W x D x H) [mm] .....	550×520×200
Number of DC connection:	2 PV&1 Battery		
DC input(PV)			
Max. input voltage.....	500Vd.c.	Isc .....	17.5*2 Ad.c.
MPP Voltage Range .....	125-500Vd.c.	MPP Full Power Voltage Range:	170-500Vd.c.
Max. Input Current .....	14Ad.c.	MPPT tracking .....	2
Max. input Power .....	6kW	-	-
Battery parameter			
Battery Rated Voltage .....	48Vd.c.	Battery Voltage Range .....	40-58Vd.c.
Max. Charging Current .....	95 Ad.c	Max. Discharging Current .....	95.8 Ad.c
Max. Charging Power .....	5kW	Max. Discharging Power .....	4.6kW
AC output (On-grid)			
Max. Output Apparent Power ....	4.6kVA	Max. Output Current .....	20Aa.c.
Rated voltage .....	230Va.c.	Rated Frequency .....	50/60Hz
Power Factor cosφ [λ].....	[-1,1]	-	-
AC output (Back-up)			
Max. Output Apparent Power ....	4.6kVA	Max. Output Current .....	20Aa.c.
Rated voltage .....	230Va.c.	Rated Frequency .....	50/60Hz

*Marvin Peng*

# ANNEX

Annex 2, Page 5 of 7

to Certificate registration no. 44 780 20 406749 - 023

Model type..... :	R5KL1		
General information			
Safety class..... :	Class II	Relative humidity .....	0-95%
IP grade..... :	IP65	Altitude .....	2000m
Type of Isolation..... :	Non Isolated	Operating temperature..... :	-25-+60°C (> 45 derating)
Firmware [DSP / MCU] .....	V1.01.01	LCD [version] .....	V1.00.01
Weight..... :	25kg	Size (W x D x H) [mm] .....	550×520×200
Number of DC connection:	2 PV&1 Battery		
DC input(PV)			
Max. input voltage..... :	500Vd.c.	Isc .....	17.5*2 Ad.c.
MPP Voltage Range .....	125-500Vd.c.	MPP Full Power Voltage Range:	180-500Vd.c.
Max. Input Current .....	14Ad.c.	MPPT tracking .....	2
Max. input Power .....	7kW	-	-
Battery parameter			
Battery Rated Voltage .....	48Vd.c.	Battery Voltage Range .....	40-58Vd.c.
Max. Charging Current .....	95 Ad.c.	Max. Discharging Current .....	110 Ad.c.
Max. Charging Power .....	5kW	Max. Discharging Power .....	5kW
AC output (On-grid)			
Max. Output Apparent Power..... :	5kVA	Max. Output Current .....	21.7Aa.c.
Rated voltage .....	230Va.c.	Rated Frequency .....	50/60Hz
Power Factor cosφ [λ] .....	[-1,1]	-	-
AC output (Back-up)			
Max. Output Apparent Power..... :	5kVA	Max. Output Current .....	21.7Aa.c.
Rated voltage .....	230Va.c.	Rated Frequency .....	50/60Hz

*Marvin Peng*

# ANNEX

Annex 2, Page 6 of 7

to Certificate registration no. 44 780 20 406749 - 023

Model type..... :	R6KL1		
General information			
Safety class..... :	Class II	Relative humidity .....	0-95%
IP grade..... :	IP65	Altitude .....	2000m
Type of Isolation..... :	Non Isolated	Number of DC connection:	2 PV&1 Battery
Firmware [DSP / MCU] .....	V1.01.01	LCD [version] .....	V1.00.01
Weight..... :	25kg	Size (W x D x H) [mm] .....	550×520×200
Operating temperature..... :	-25-+60°C (> 45 derating)		
DC input(PV)			
Max. input voltage .....	500Vd.c.	Isc .....	17.5*2 Ad.c.
MPP Voltage Range .....	125-500Vd.c.	MPP Full Power Voltage Range:	220-500Vd.c.
Max. Input Current .....	14Ad.c.	MPPT tracking .....	2
Max. input Power .....	7kW	-	-

*Marvin Peng*



# ANNEX

Annex 2, Page 7 of 7

to Certificate registration no. 44 780 20 406749 - 023

Battery parameter			
Battery Rated Voltage .....	48Vd.c	Battery Voltage Range .....	40-58Vd.c.
Max. Charging Current .....	95 Ad.c	Max. Discharging Current .....	110 Ad.c
Max. Charging Power .....	5kW	Max. Discharging Power .....	5kW
AC output (On-grid)			
Max. Output Apparent Power.....	6kVA	Max. Output Current .....	26Aa.c.
Rated voltage .....	230Va.c.	Rated Frequency .....	50/60Hz
Power Factor $\cos\phi$ [ $\lambda$ ] .....	[-1,1]	-	-
AC output (Back-up)			
Max. Output Apparent Power.....	6kVA	Max. Output Current .....	26Aa.c.
Rated voltage .....	230Va.c.	Rated Frequency .....	50/60Hz

Remark:

For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.

