

CERTIFICATE of Conformity



Registration No.: A3 50708093 0001

Report No.: CN25KB6C 001

Holder: AISWEI Technology Co., Ltd.
Room 302-1, Unit 015, No.468 Zhongshan
South First Road, Huangpu District,
Shanghai
P.R. China

Product: PV-Inverter
(Grid-connected PV Inverter)

Identification: Type Designation: ASW60K-LT-G3
ASW50K-LT-G3
ASW45K-LT-G3
Firmware Version: V610-03030-19.001
Remark(s): Refer to report CN25KB6C 001 for details.

Tested acc. to: EN 50549-1:2019+A1
EN 50549-10:2022

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Durch die DAkkS nach
DIN EN ISO/IEC 17065:2013
akkreditierte Zertifizierungsstelle.
Die Akkreditierung gilt nur für den in der
Urkundenanlage D-ZE-14169-01-02
aufgeführten Akkreditierungsumfang.

Certification Body

Date 22.01.2026

A. Chen

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

Certificate No.: A3 50708093 0001

Certificate Of Conformity

License holder: AISWEI Technology Co., Ltd.
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South First Road, Huangpu District,
Shanghai
P.R. China

Type of product: PV Inverter(Grid-connected PV Inverter)

Model: ASW60K-LT-G3, ASW50K-LT-G3, ASW45K-LT-G3

Firmware version: V610-03030-19.001

Standard: **EN 50549-1:2019+A1**
Requirements for generating plants to be connected in parallel with distribution networks - Part 1: Connection to a LV distribution network -Generating plants up to and including Type B
EN 50549-10:2022
Requirements for generating plants to be connected in parallel with distribution networks - Part 10: Tests for conformity assessment of generating units

Report No.: CN25KB6C 001

Date of issue: 22.01.2026

Remark:

The verification of conformity refers to the above mentioned product. This is to verify that the specimen is in conformity with the assessment requirement mentioned above. This verification does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.



A. Chen
Certifier



EN 50549-1:2019+A1 Annex C Parameter Table

Clause(s) / sub-clause(s) of EN 50549-1:2019+A1	Parameter ^a	Remarks / additional information ^b	Typical value range	Value default
4.4.2 Operating frequency range	47,0 – 47,5 Hz Duration	Unlimited	0 – 20 s	0s
	47,5 – 48,5 Hz Duration	Unlimited	30 – 90 min	30 min
	48,5 – 49,0 Hz Duration	Unlimited	30 – 90 min	30 min
	49,0 -51,0 Hz Duration	Unlimited	not configurable	unlimited
	51,0 – 51,5 Hz Duration	Unlimited	30 – 90 min	30 min
	51, 5 – 52 Hz Duration	Unlimited	0 – 15 min	0 s
4.4.3 Minimal requirement for active power delivery at underfrequency	Reduction threshold	Not configurable	not configurable	--
	Maximum reduction rate	No reduction ($\leq 10\% P_M / \text{Hz}$)	not configurable	$\leq 2\% \text{ PM/Hz}$
4.4.4 Continuous operating voltage range	Upper limit	110% U_c	not configurable	110% U_n
	Lower limit	85% U_c	not configurable	85% U_n
4.5.2 Rate of change of frequency (ROCOF) immunity	ROCOF withstand capability (defined with a sliding measurement window of 500 ms)	Up to $\pm 3.5 \text{ Hz/s}$	0 – 20 Hz/s	2 Hz/s
4.5.3.2 Generating plant with non-synchronous generating technology	Maximum power resumption time	Not configurable	0 – 10 s	$\leq 1 \text{ s}$
	Voltage-Time-Diagram	Configurable (Default / Most stringent requirement)	see Figure 6	Time [s]
				U [p.u.]
				0,0
				0,15
				0,2
4.5.4 Over-voltage ride through (OVRT)	Voltage-Time-Diagram	Configurable (Default requirement/most stringent requirement)	not configurable	3,0
				0,85
				180
				0,85
				180
				0,90
				$\leq 1 \text{ s}$
				Time [s]
				U [p.u.]
				0,0
				1,25
				0,1
				1,25
				0,1
				1,20
				5,0
				1,20
				5,0
				1,15
				60
				1,15
				60
				1,10

4.5.5 – Phase jump immunity	Phase jump immunity	Not configurable (Up to $\pm 180^\circ$)	Not configurable	$\pm 180^\circ$
4.6.1 Power response to over frequency	Threshold frequency f_1	Configurable	50 Hz – 55 Hz	50,2 Hz
	Droop	Configurable	2 % – 15 %	5 %
	Power reference	Not configurable /Configurable	PM Pmax	PM for other non- synchronous generating technology
	Intentional delay	Configurable	0 – 2 s	0 s
	Deactivation threshold f_{stop}	Configurable	50,0 Hz – f_1	deactivated
	Deactivation time t_{stop}	Configurable	0 – 600 s	deactivated
	Acceptance of staged disconnection	Not configurable	yes no	yes
4.6.2 Power response to underfrequency	Threshold frequency f_1	Configurable	45 Hz – 50 Hz	49,8 Hz
	Droop	Configurable	2 % – 15 %	5 %
	Power reference	Not configurable (P_{max})	PM Pmax	Pmax
	Intentional delay	Configurable	0 – 2 s	0 s
4.7.2.2 Capabilities	Active factor / Reactive power (%Pn) range overexcited	0,8– 1 / 60% $P_n - 0$	0,8 – 1 / 60 % $P_n - 0$	0,8 – 1 / 60% $P_n - 0$
	Active factor / Reactive power (%Pn) range underexcited	0,8– 1 / 60% $P_n - 0$	0,8 – 1 / 60 % $P_n - 0$	0,8 – 1 / 60% $P_n - 0$
4.7.2.3 Control modes	Enabled control mode	Configurable	Q setp. Q(U) Q(P) cos ϕ setp. cos ϕ (P)	Q setpoint
4.7.2.3.2 Setpoint control modes	Q setpoint and excitation	Configurable	0 – 60 % P_n	0
	Cos ϕ set point and excitation (ov and uv)	Configurable	1 – 0,8	1
	Time constant (3 τ)	Configurable	0 – 200 s	10 s
4.7.2.3.3 Voltage related control modes	Characteristic curve	Configurable Q(U)	$D_{bchar.}$ -6% to +6 % U_n $Q_{max char.}$ 10% – 100% of $Q_{max over}$ and $Q_{max under}$	indicate default characteristic (Figure 33 of EN 50549-10)

			Slope of the steepest: $1\% - 100\% Q_{\max} / 1\% U_n$	
	Time constant (3τ)	Configurable	0 – 200 s	10 s
	Min $\cos \varphi$	Configurable	0,0 – 0,5	0,4
	Lock in power(P/P_n)	Configurable	0 % – 20 %	deactivated
	Lock out power(P/P_n)	Configurable	0 % – 20 %	deactivated
4.7.2.3.4 Power related control mode	Characteristic curve	Configurable $\cos \varphi (P)$ $Q(P)$	$Q_{\max}$ char. 10% – 100% of $Q_{\max}$ over and $Q_{\max}$ under Slope of the steepest: $2\% - 200\% Q_{\max} / 10\% P_n$	indicate default characteristic (Figure 36 of EN 50549-10)
	Time constant (3τ)	Configurable	0 – 200 s	10 s
	Lock-in voltage (U/U_n)	Configurable	100% – 110%	deactivated
	Lock-out voltage (U/U_n)	Configurable	90% – 100%	deactivated
4.7.4.2.2 Zero current mode for converter connected generating technology	Enabling	Configurable	Enable Disable	Disabled
	Static voltage range overvoltage	Configurable	100 % U_n – 135 % U_n	120 % U_n
	Static voltage range undervoltage	Configurable	0 % – 100 % U_n	50 % U_n
4.9.2 Requirements on voltage and frequency protection	Threshold for protection as dedicated device [in A or kW, kVA]	Configurable	16 A – 250 kVA	--
	Undervoltage threshold stage 1	Configurable	0 U_n – 1 U_n	0,85 U_n
	Undervoltage operate time stage 1	Configurable	0 s – 600 s	1,4 s
	Undervoltage threshold stage 2	Configurable	0 U_n – 1 U_n	0,50 U_n
	Undervoltage operate time stage 2	Configurable	0 s – 600 s	1,4 s
	Overvoltage threshold stage 1	Configurable	1,0 U_n – 1,35 U_n	1,15 U_n
	Overvoltage operate time stage 1	Configurable	0 s – 600 s	0,12 s
	Overvoltage threshold stage 2	Configurable	1,0 U_n – 1,35 U_n	1,2 U_n
	Overvoltage operate time stage 2	Configurable	0 s – 600 s	0,12 s

	Overvoltage threshold 10 min mean protection	Configurable	1,0 Un – 1,35 Un	1,10 Un
	Overvoltage threshold 10 min mean protection	Configurable	0 s – 600 s	0.1 s
	Underfrequency threshold stage 1	Configurable	45,0 Hz– 50,0 Hz	47,5 Hz
	Underfrequency operate time stage 1	Configurable	0 s – 600 s	0,4 s
	Underfrequency threshold stage 2	Configurable	45,0 Hz– 50,0 Hz	45,0 Hz
	Underfrequency operate time stage 2	Configurable	0 s – 600 s	0,4 s
	Overfrequency threshold stage 1	Configurable	50,0 Hz – 55,0 Hz	52,0 Hz
	Overfrequency operate time stage 1	Configurable	0 s – 600 s	0,4 s
	Overfrequency threshold stage 2	Configurable	50,0 Hz – 55,0 Hz	55,0 Hz
	Overfrequency operate time stage 2	Configurable	0 s – 600 s	0,4 s
4.10.2 Automatic reconnection after tripping	Lower frequency	Configurable	47,0 Hz – 50,0 Hz	49,5 Hz
	Upper frequency	Configurable	50,0 Hz – 52,0 Hz	50,2 Hz
	Lower voltage	Configurable	50 % Un – 100 % Un	85 % Un
	Upper voltage	Configurable	100 % Un – 120 % Un	110 % Un
	Observation time	Configurable	10 s – 600 s	60 s
	Active power increase gradient	Configurable	0 % – 10000 %/min	10 % /min
4.10.3 Starting to generate electrical power	Lower frequency	Configurable	45,0 Hz – 50,0 Hz	49,5 Hz
	Upper frequency	Configurable	50,0 Hz – 55,0 Hz	50,1 Hz
	Lower voltage	Configurable	0 % – 100 % Un	85 % Un
	Upper voltage	Configurable	100 % – 130 % Un	110 % Un
	Observation time	Configurable	0 s – 600 s	60 s
	Active power increase gradient	Configurable	0 % – 10000 %/min	10 % /min
4.11.1 Ceasing active power	Remote operation of the logic interface	Configurable (Digital input by RS485/Wi-Fi port)	yes no	Yes A Modbus signal via RS485 or USB can be used to change or stop the active output.

4.11.2 Reduction of active power on set point	Remote operation NOTE: If yes further definition is provided by the DSO	Configurable (Digital input by RS485/Wi-Fi port)	yes no	Yes A Modbus signal via RS485 or USB can be used to change or stop the active output.
4.12 Remote information exchange	Remote information exchange required NOTE: If yes further definition is provided by the DSO	Configurable (The protocols will be agreed between the local DSO and PGUs at final installation.	yes no	Yes SunSpec and Modbus
Supplementary: ov: Over-excited; uv: Under-excited ^a If additional parameters have been evaluated during the test, these shall be added as additional lines in the table. ^b This column should be used for manufacturer specific parameter descriptions.				