

SW 30/40/50kW

Three Phase | 2-4 MPPTs

MODEL

SW030KTL-T1-G2 | SW040KTL-T1-G2 | SW050KTL-T1-G2



High Power Generation

- Up to 4 MPPTs, Max. efficiency 98.7%
- Max. 21A per string & 180% PV oversizing



Friendly & Thoughtful Design

- Operate quietly at under 50dB
- Compact design for easy installation



Superb Safety & Reliability

- AI-driven AFCI 3.0 for safety
- Type II SPD on both AC and DC sides
- IP66 ingress protection



Cost-Effective Design

- Support aluminum cable for lower LCOE
- String-level monitoring for easy O&M

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Technical Data	SW030KTL-T1-G2	SW040KTL-T1-G2	SW050KTL-T1-G2
Input			
Max. Input Voltage (V) *1	1100	1100	1100
MPPT Operating Voltage Range (V) *2	140 ~ 1000	140 ~ 1000	140 ~ 1000
Start-up Voltage (V)	160	160	160
Nominal Input Voltage (V)	600	600	600
Max. Input Current per MPPT (A)	42 / 32	42 / 42 / 32	40
Max. Short Circuit Current per MPPT (A)	52.5 / 40	52.5 / 52.5 / 40	52
Number of MPP Trackers	2	3	4
Number of Strings per MPPT	2	2	2
Output			
Nominal Output Power (kW)	30	40	50
Nominal Output Apparent Power (kVA)	30	40	50
Max. AC Active Power (kW)	33	40	50
Max. AC Apparent Power (kVA)	33	40	50
Nominal Output Voltage (V)	220 / 380, 230 / 400, 240 / 415, 3L / N / PE or 3L / PE		
Output Voltage Range (V) (according to local standard)	180 ~ 280	180 ~ 280	180 ~ 280
Nominal AC Grid Frequency (Hz)	50 / 60	50	50 / 60
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65	45 ~ 55	45 ~ 55 / 55 ~ 65
Max. Output Current (A)	50	60.7	75.7
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%		
Efficiency			
Max. Efficiency	98.6%	98.6%	98.7%
European Efficiency	98.3%	97.8%	98.0%
Protection			
PV String Current Monitoring		●	
PV Insulation Resistance Detection		●	
Residual Current Monitoring		●	
PV Reverse Polarity Protection		●	
Anti-islanding Protection		●	
AC Overcurrent Protection		●	
AC Short Circuit Protection		●	
AC Overvoltage Protection		●	
DC Switch		●	
DC Surge Protection	Type III (Type II Optional)	Type III (Type II Optional)	Type II
AC Surge Protection	Type III (Type II Optional)	Type III (Type II Optional)	Type II
AFCI		○	
Rapid Shutdown		○	
Remote Shutdown		●	
PID Recovery		○	
Power Supply at Night		○	
General Data			
Operating TemperatureRange (°C)		-30 ~ +60	
Relative Humidity		0 ~ 100%	
Max. Operating Altitude (m)		4000	
Cooling Method		Smart Fan Cooling	
User Interface		LED, LCD (Optional), WLAN + APP	
Communication		RS485, WiFi + LAN + Bluetooth, 4G + Bluetooth (Optional)	
Communication Protocols	Modbus-RTU (SunSpec Compliant), Modbus-TCP	Modbus RTU, Modbus TCP	Modbus-RTU (SunSpec Compliant), Modbus-TCP
Weight (kg)	21.1	28	33
Dimension (W × H × D mm)	530 × 413 × 227	585 × 483 × 230	646 × 484 × 230
Noise Emission (dB)	45	45	50
Topology		Non-isolated	
Self-consumption at Night (W)		<1	
Ingress Protection Rating		IP66	
DC Connector		MC4 (4 ~ 6mm²)	
AC Connector	OT / DT terminal (Max. 25mm²)	OT / DT terminal (Max. 35mm²)	OT / DT terminal (Max. 70mm²)

● Integrated ○ Optional

*1: When the input voltage is 1000V-1100V, the inverter will enter standby mode. The inverter will return to normal operation state when the voltage returns to the MPPT working voltage range.
 *2: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.