

# ASW50K-LT

> Three-Phase String Inverter 50kW

- Smart string monitoring
- High yield
- Integrated DC and AC surge protection
- Derating only starts above 45°C
- Excellent power density



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Technical data	ASW50K - LT
<b>Input (DC)</b>	
Max PV array power	62500 Wp STC
Max input voltage	1000 V
MPP voltage range / rated input voltage	200 V to 950 V / 625 V
Min input voltage	200 V
Initial feed-in voltage	300 V
Max operating input current per MPPT input A / input B	30 A / 30 A / 40 A
Max input current per string input A / input B	12 A
Number of independent MPP inputs / strings per MPP input	3 / A: 3; B: 3; C:4
<b>Output (AC)</b>	
Rated power	50000 W
Max apparent AC power	55000 VA
AC nominal voltage	220 V / 380 V 230 V / 400 V
AC voltage range	160 V to 300 V
AC grid frequency / range	50 Hz / 45 Hz to 55 Hz 60 Hz / 55 Hz to 65 Hz
Rated grid frequency / rated grid voltage	50 Hz / 230 V
Max output current / Rated output current	80 A / 75.8 A
Power factor at rated power / adjustable displacement power factor	1 / 0.8 overexcited to 0.8 underexcited
Feed-in phases / AC connection	3 / 3-N-PE
Harmonic distortion (THD) at rated output	<= 3 %
<b>Efficiency</b>	
Max efficiency / European efficiency	> 98.6 % / > 98 %
<b>Safety Protection</b>	
Input-side disconnection device	●
Ground fault monitoring / grid monitoring	● / ●
DC reverse polarity protection / AC short circuit current capability	● / ●
All-pole-sensitive residual-current monitoring unit	●
Smart string monitoring	●
DC surge arrester (Type II)	●
AC surge protection	●
Protection class (according to IEC 62109-1) / overvoltage category (according to IEC 62109-1)	I / AC : III ; DC : II
<b>General data</b>	
Dimensions (W / H / D)	510 / 790 / 265 mm
Weight	63 kg
Operating temperature range	-25 °C ... +60 °C
Noise emission (typical)	< 60 dB(A)
Self-consumption (at night)	< 1 W
Topology	Transformerless
Cooling concept	Forced convection
Degree of protection (according to IEC 60529)	IP65
Climatic category (according to IEC 60721-3-4)	4K4H
Max permissible value for relative humidity (non-condensing)	100 %
Max operating altitude	4000 m
<b>Features</b>	
DC connection	H4
AC connection	Terminal block
Mounting type	Wall-mounting bracket
Display	Graphic
LED Indicators (Status / Fault / Communication)	●
Interface: 2 x RS485	●
Modbus data protocol	●
Anti-PID	○
Certificates and approvals (more available upon request)	IEC 62109-1/2, IEC 60068, IEC 61683, IEC 61727, IEC 62116, NB/T32004-2013
Type designation	ASW50K-LT

● standard features ○ optional features - not available

Data at nominal conditions. All information is subject to change. Version: February 2020