

# Residential three-phase string inverter



## High Yield

- Module efficiency 23.8%
- Generate power under low-light  
Longer system operation time
- MPPT per string

## Safety

- DC/AC surge protection

## Easy installation, O&M

- Small and light
- Smart OTA
- Real-time monitoring per string

## Easy and stable grid-connection

- Self-adapting control algorithm  
suitable for poor grid

# Technical Parameters

MODEL	AE-SPI-15KTL-S1	AE-SPI-20KTL-S1	
<b>Efficiency</b>			
Max. Efficiency	98.6%	98.6%	
European Efficiency	98.2%	98.3%	
<b>Input(DC)</b>			
Max. DC Voltage	1,100V	1,100V	
Nominal Voltage	620V	620V	
Start Voltage	250V	250V	
MPPT Voltage Range	140V~1,000V	140V~1,000V	
Number of MPPT	2	2	
Strings Per MPPT	2/1	1	
Max. Input Current Per MPPT	30A/15A	30A	
Max. Short-circuit Current Per MPPT	40A/20A	40A	
<b>Output(AC)</b>			
Nominal AC Output Power	15,000W	20,000W	
Max. AC Output Power	16,500VA	22,000VA	
Nominal AC Voltage	400V 3L+N		
AC Grid Frequency Range	50/60Hz(±5Hz)		
Max. Output Current	23.9A	31.9A	
Power Factor(Φ)	0.8leading-0.8lagging		
THDi	<3%		
<b>General Specifications</b>			
Dimensions (W x H x D)	380x483x193mm	Weight	20.7kg
AC Output Terminal Type	Connector	Operating Temperature Range	-25°C~+60°C
IP Class	IP66	Cooling Type	Fan Cooling
Topology	Without Transformer	Max. Operating Altitude	4,000m
Communication	RS485/Wifi/4G	Max. Operating Humidity	0-100%(No condensation)
Display	LCD		
Certification & Standard	EN/IEC62109-1/2; IEC/EN61000-6-2; IEC/EN61000-6-4; IEC61683; IEC60068; IEC60529; IEC62116; IEC61727; EN50549-1; NB/T32004-2018; GB/T19964-2012		
<b>Protection devices</b>			
DC Switch	yes	String Fault Detection	yes
Output Over Current Protection	yes	DC/AC Surge Protection	DC: Type II / AC: Type III (Type II optional)
Anti-islanding Protection	yes	Insulation Detection	yes
DC Reverse Polarity Protection	yes	AC Short-Circuit Protection	yes