

# 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-5KTL-S1	AE-SPI-8KTL-S1	AE-SPI-10KTL-S1	AE-SPI-12KTL-S1
<b>Efficiency</b>				
Max. Efficiency	98.4%	98.6%	98.6%	98.6%
European Efficiency	97.5%	98.0%	98.1%	98.1%
<b>Input(DC)</b>				
Max. DC Voltage	1,100V	1,100V	1,100V	1,100V
Nominal Voltage	620V	620V	620V	620V
Start Voltage	250V	250V	250V	250V
MPPT Voltage Range	140V~1,000V	140V~1,000V	140V~1,000V	140V~1,000V
Number of MPPT	2	2	2	2
Strings Per MPPT	1	1	1	1
Max. Input Current Per MPPT	15A	15A	15A	15A
Max. Short-circuit Current Per MPPT	20A	20A	20A	20A
<b>Output(AC)</b>				
Nominal AC Output Power	5,000W	8,000W	10,000W	12,000W
Max. AC Output Power	5,500VA	8,800VA	11,000VA	13,200VA
Nominal AC Voltage	400V 3L+N			
AC Grid Frequency Range	50/60Hz(±5Hz)			
Max. Output Current	8.0A	12.8A	16.0A	19.2A
Power Factor(Φ)	0.8leading-0.8lagging			
THDi	3%			
<b>General Specifications</b>				
Dimensions (W x H x D)	380x483x161mm		Weight	<17kg
AC Output Terminal Type	Connector		Operating Temperature Range	-25°C~+60°C
IP Class	IP66		Cooling Type	Natural 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	