

Overview

The SPT50-70KTL series three-phase on-grid PV inverter adopts advanced MPPT control algorithms, maximizing the conversion of DC power from the PV array into AC power. The energy can be fed into the grid or utilized for self-consumption via CT/Meter detection, meeting diverse grid requirements across different regions. It is an ideal solution for industrial & commercial applications.

Features

High Efficiency

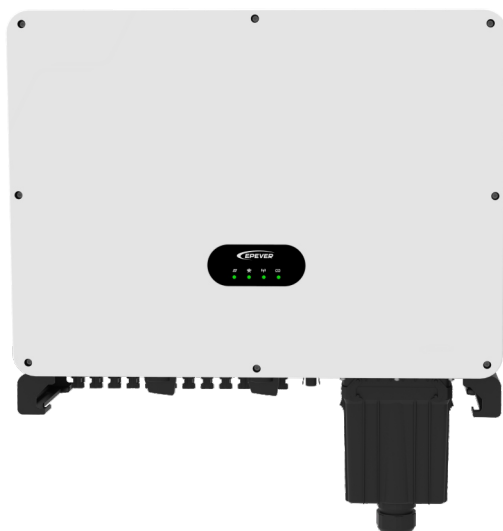
- High yield 110% rating power
- Maximum conversion efficiency: 98.6%
- Multiple MPPTs, Max.PV input voltage:1100VDC, Input current per MPPT: 30A

Reliable & Safe

- IP65 protection for outdoor use
- Built-in Type II SPD
- Optional AFCI function
- Optional zero export function

User-Friendly & Intelligent Monitoring

- Optional LCD display
- Standard USB communication port, WiFi/ GPRS (optional)



Model	SPT50KTL	SPT60KTL	SPT70KTL	SPT50KTL-H	SPT60KTL-H	SPT70KTL-H
PV Input (DC)						
Max. input power	60,000W	75,000W	90,000W	60,000W	75,000W	90,000W
Max. input voltage	1,100V					
Start-up voltage	250V					
Rated input voltage	620V		720VDC			
Max. input current per MPPT	30A					
Max. short-circuit current per MPPT	36A					
MPPT voltage range	180~1000V					
Number of MPPTs	4	5	6	4	5	6
Number of strings per MPPT	2					
AC Output						
Rated output power	50,000W	60,000W	70,000W	50,000W	60,000W	70,000W
Max.output apparent power	55,000VA	66,000VA	77,000VA	55,000VA	66,000VA	77,000VA
Rated output current	72.2A	86.6A	101A	60.2A	72.2A	84.2A
Max. output current	83.6A	100.3A	117A	67A	80A	92.6A
Rated grid voltage	380VAC/400VAC			480VAC/500VAC		
Rated grid frequency	50Hz/60Hz					
THDi	< 3%					
Power factor	≈1 (Adjustable from 0.8 leading to 0.8 lagging)					
Efficiency						
Max. efficiency	98.50%		98.6%	98.5%	98.6%	
European efficiency	98.3%	98.4%				
Protection						
Basic protection	• PV reverse polarity • PV insulation resistance • PV string current monitoring		• AC output overvoltage • AC output overcurrent • AC output short circuit	• Anti-islanding • Grid monitoring • Residual current (RCD) detection		
AFCI	Optional					
DC switch	Integrated					
SPD	DC Type II / AC Type II					
Environmental Parameters						
Operating temperature	-30°C to 60°C					
Relative humidity	0 - 100%					
Altitude	4,000m(> 2,000m Derating)					
Ingress protection	IP65					
Mechanical Parameters						
Dimensions (L×W×H) (mm)	700×610×298					
Weight (kg)	52	55	57	52	55	57
Others						
Self-consumption (Night)	< 3W					
Topology	Transformer-less					
Cooling method	Intelligent fan					
Display	LED/LCD (Optional)					
PV input connector	H4/MC4 (Optional)					
AC output connector	OT connector					
Certifications	IEC/EN 62109; IEC/EN 61000 EN 50549; NB/T32004-2018 (CQC)					

