



STRING INVERTER

SOI-S320K-HT



Highly Profitable

- 75A design for higher output power
- 14% less switching loss, 99.03% conversion efficiency
- AI dynamic MPPT, boosting power generation by 5%

Ultimately Reliable

- Terminal temperature monitoring with overheat protection
- Smart string disconnection, <25ms fast shutdown
- IP66, 1400+ cumulative rigorous tests

Grid-Friendly

- Full power feed in grid at SCR<1.2
- THDi <1% for improved power quality

Smart & Manageable

- Intelligent IV curve scanning with 99% fault detection accuracy
- Real-time monitoring with OTA for online maintenance

Product Model		SOI-S320K-HT	
PV Input			
Max. Input Voltage		1,500V	
Nominal Input Voltage		1,080V	
Start-up Voltage		500V	
MPPT Operating Voltage Range		480 ~ 1,500V	
Max. Input Current Per MPPT		75A	
Max. Short-Circuit Current		120A	
Number of MPP Trackers		6	
Max. Input Number Per MPP Tracker		24	30
AC Output			
Nominal Output Power		320kW	
Max. Apparent Power		352kVA	
Nominal Output Voltage		3L / PE, 800V	
Nominal AC Grid Frequency		50Hz / 60Hz	
Nominal Output Current		230.9A	
Max. Output Current		254A	
Adjustable Power Factor		>0.99 (0.8 leading...0.8 lagging)	
THDi		< 3%	
Efficiency			
Max. Efficiency		≥99.03%	
European Weighted Efficiency		≥98.52%	
MPPT Efficiency		99.9%	
Protection			
Active Anti-islanding Protection		General Electric Frequency Shift	
Residual Current Monitoring		Yes	
DC Reverse Polarity Protection		Yes	
DC Switch		Yes	
AC Short-Circuit Protection		Yes	
AC Overvoltage Protection		Yes	
AC Overcurrent Protection		Yes	
DC Surge Protection		Type II	
AC Surge Protection		Type II	
Ground Fault Detection		Yes	
Smart String-level Disconnection		Yes	
Smart Connector-level Detection		Yes	
General Data			
Operating Temperature Range		-35 to + 60°C	
Relative Operating Humidity		0 ~ 100 %RH	
Operating Altitude		5,000m	
Cooling		Smart Air Cooling	
Display		LED / WLAN+App	
Communication		RS485 / HPLC	
Weight		130kg	
Dimensions (W*H*D)		1120*820*380mm	
Topology		Non-Isolated	
Degree of Protection		IP66	
Overvoltage Level		PV II / AC III	

SUNPLUS pursues minimizing paper output in consideration of the global environment

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