

SCA25~40K-T-EU

Three-Phase String Inverter

25~40kW • 3/4 MPPTs • 1100Vdc System



Efficient

Appealing yield

- 3/4 MPPTs with Max. Efficiency 98.59%
- Easily compatible with various PV modules based on max. input current 15A per string
- AFCI function standard
- 170% DC/AC ratio
- Lower startup & wider MPPT voltage

Smart

Pragmatic option

- Communication interfaces [RS485/Wi-Fi (Standard) & 4G (Optional)]
- Built-in Bluetooth and App for local and remote monitoring
- Support zero export by meter

Safe

Solid quality

- Durable and robust component
- IP66 & C5 protection
- Type II SPD for both DC and AC

Model Name	SCA25K-TM-EU	SCA30K-T-EU	SCA37.5K-T-EU ¹	SCA40K-T-EU
DC Input				
Max. DC Power	42.5kW	51kW	63.75kW	68kW
Max. DC Voltage	1100Vdc			
MPPT Operating Voltage Range	200 - 1000Vdc			
MPPT Operating Voltage Range@full load	400 - 850Vdc			
Start Voltage	250Vdc			
Rated DC Voltage	615Vdc			
Number of MPPT	3		4	
Number of DC Connection Sets per MPPT	2		2	
Max. input current per MPPT	30A			
Max. DC short-circuit current per MPPT	45A			
String Fuse	/			
DC Disconnection Type	Integrated Switch			
AC Output				
Rated AC Power	25kW	30kW	37.5kW	40kW
Max. AC Power	27.5kVA	33kVA	41.3kVA	44kVA
Rated AC Voltage	380 / 400V			
AC Voltage Range	270 - 540V			
Grid Connection Type	3Φ / N / PE			
Max. AC Current	41.7A	50A	62.5A	66.7A
Grid Frequency	50 / 60Hz			
Grid Frequency Range	45-55 / 55-65Hz			
Power Factor (cosφ)	>0.99(±0.8 adjustable)			
Current THD	< 3%			
AC Disconnection Type	/			
System Data				
Topology	Transformerless			
Max. Efficiency	98.06%	98.15%	98.59%	98.45%
Euro Efficiency	98.00%			
Consumption at Night	<1W			
Protection				
DC reverse connection protection	Yes			
AC short circuit protection	Yes			
Leakage current protection	Yes			
Grid monitoring	Yes			
Ground fault monitoring	Yes			
Surge Protection	DC Type II / AC Type II			
AFCI	Yes			
Environment Data				
Ingress Protection	IP66			
Cooling Method	Natural Convection			
Operating Temperature	-25°C to +60°C			
Ambient Humidity	0 - 100%			
Altitude	4000m			
Display and Communication				
Display	LED + APP(Bluetooth)			
Communication	RS485 / Wi-Fi (Standard) & 4G (Optional)			
Mechanical Data				
Dimensions (W*H*D)	684 * 488 * 269mm			
Weight	28kg	30kg	35kg	
DC Connection Type	MC4 (Max. 6 mm ²)			
AC Connection Type	OT/DT Terminal (Max.35 mm ²)			
Safety				
Certifications ²	IEC/EN 62109-1/2,IEC/EN 61000-6-2/4,IEC/EN 62920,IEC 61727/62116,PORTARIA N° 140&515			

¹ "AC Voltage Range" and "Grid Frequency Range" may differ according to specific grid codes.

² The certificates are for reference only. Please consult the local sales staff for detailed certification.

³ AC Power is different under different rated AC voltage.

⁴ Transformer compatibility: this model only supports connection with IT systems, not compatible with TN/TT systems.