



SI SERIES

PV String Inverter

Three Phase

30kW | 36kW | 40kW | 50kW | 60kW

High-Efficiency



Max. efficiency up to 99%



Max. 150% PV oversizing,
110% AC overloading output



Max. string current up to 20A



Low startup voltage and wide
voltage range



Max. 4 MPPT design with
smart MPPT algorithm

Safe & Reliable

- SPD-II protection on both DC / AC sides

- IP65 protection

- AI powered AFCI protection (optional)

- Aluminum unibody housings structure

- IP68 cooling fan

Smart

- Smart IV curve scanning

- Multiple monitoring methods supported (optional: Wi-Fi / LAN / GPRS)

- Built-in export power control

- Remote firmware upgrade with simple operation

	SI-3P30K-Y1	SI-3P36K-Y1	SI-3P40K-Y1	SI-3P50K-Y1	SI-3P60K-Y1
PV Input Data					
Max. DC Power (W)	45000	45000	60000	75000	90000
Max. DC Voltage (V)	1100				
MPPT Voltage Range (V)	200 - 1000				
MPPT Full Power Voltage Range (V)	500 - 850				
Rated Input Voltage (V)	620				
Start-up Voltage (V)	200				
Max. Input Current (A)	38 × 2	38 × 2	40 × 3	48 × 3	38 × 4
Max. Short Current (A)	48 × 2	48 × 2	48 × 3	48 × 3	48 × 4
No. of MPP Tracker / No. of PV String	2 / 5	2 / 5	3 / 7	3 / 7	4 / 8
Input Connector Type	MC4				
AC Output Data					
Max. Output Power (VA)	33000	39600	44000	55000	66000
Nominal Output Power (W)	30000	36000	40000	50000	60000
Max. Output Current (A)	48	60	65	80	96
Nominal Output Voltage (V)	3P + N + PE / 3P + PE 230 / 400				
Grid Voltage Range	260 Vac - 519 Vac (according to local standard)				
Nominal Output Frequency (Hz)	50 / 60				
Grid Frequency Range	45 - 55 Hz / 55 - 66 Hz (according to local standard)				
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)				
Output Current THD	<3%				
Efficiency					
Max. Efficiency	98.50%	98.65%	98.65%	98.80%	99.00%
Euro Efficiency	98.10%	98.20%	98.25%	98.45%	98.50%
Protection					
PV Reverse Polarity Protection	YES				
PV Insulation Resistance Detection	YES				
AC Short Circuit Protection	YES				
AC Over Current Protection	YES				
AC Over Voltage Protection	YES				
Anti-Islanding Protection	YES				
Residual Current Detection	YES				
Over Temperature Protection	YES				
Integrated DC switch	YES				
Surge Protection	Integrated (Type II)				
Smart IV Curve Scanning	YES				
Quick Arc Fault Circuit Interruption	Optional				
General Data					
Dimensions (W x H x D, mm)	450 x 485 x 210		710 x 470 x 236		
Weight (kg)	26		44		51
Protection Degree	IP65				
Enclosure Material	Aluminum				
Ambient Temperature Range (°C)	-25 to 60				
Humidity Range	0 - 100%				
Topology	Transformerless				
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)				
Cooling Concept	Intelligent fan cooling				
Noise Emission (db)	<51		<55		
Night Power Consumption (W)	<1				
Max. Operation Altitude (m)	≤4000				
Certifications and Standards					
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12				
Safety Standard	IEC 60068, UL1741, EN62109				
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98/G99, IEC61727				