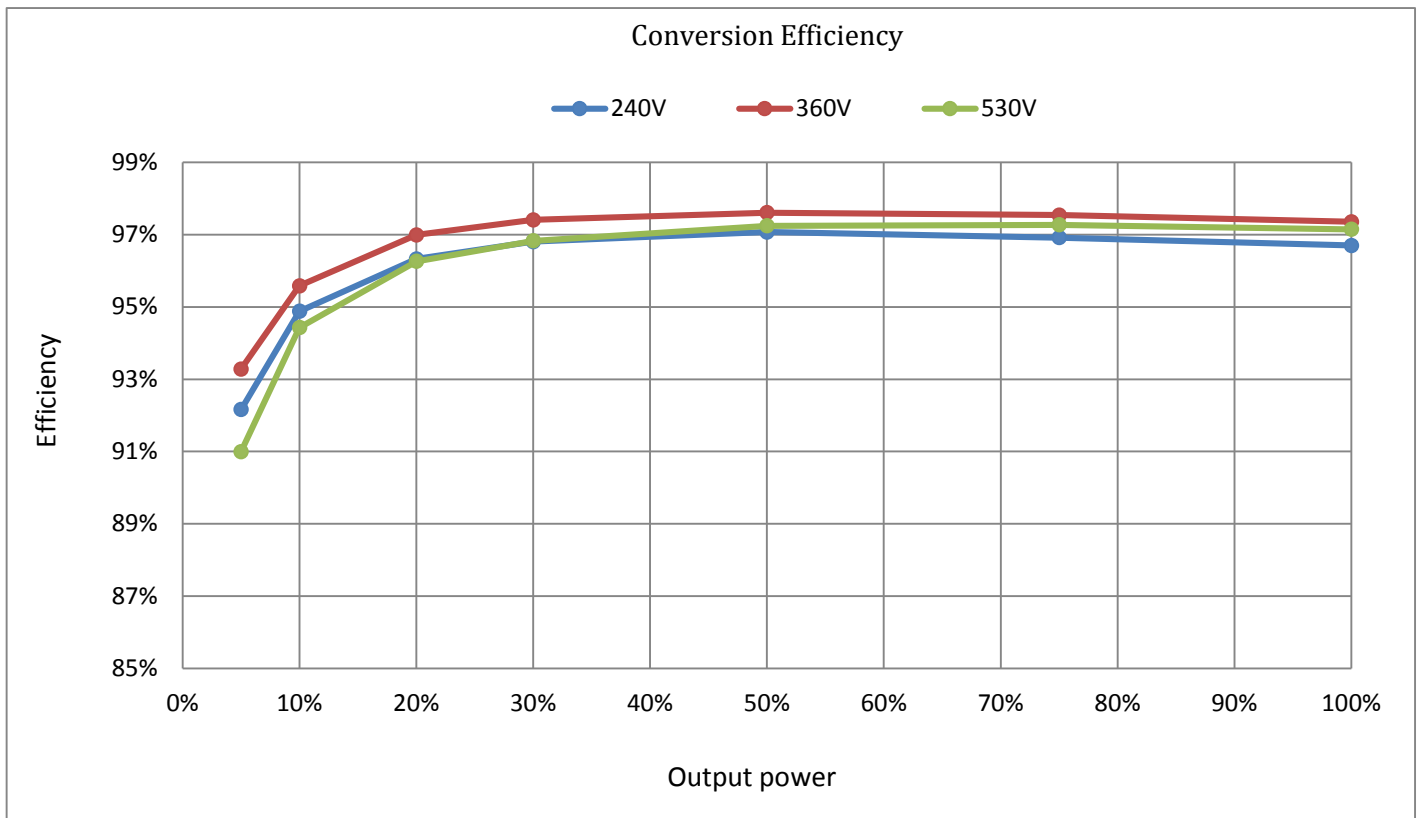




**ST Series Features:**

- Dual MPPT for different roof orientation
- IP65 rating for indoor and outdoor installation
- Support high power loads when the grid goes down
- Remote upgrade and maintenance
- Full working efficiency with temperature of 45 °C
- Four intelligent working modes for different conditions
- Up to 97.6% maximum efficiency (PV to grid)



## ST Series Technical Specifications

Model	ST-INV-S3.0	ST-INV-S5.0
<b>PV input:</b>		
Maximum input voltage	d.c. 550 V	d.c. 550 V
Minimum operating voltage	d.c. 70 V	d.c. 70 V
Start-up input voltage	d.c. 100 V	d.c. 100 V
Rated input voltage	d.c. 360 V	d.c. 360 V
MPP voltage range	d.c. 125...530 V	d.c. 125...530 V
Number of independent MPP inputs	2	2
Strings per MPP input	A:1, B:1	A:1, B:1
Maximum input current (input A / input B)	d.c. 11 A / 11 A	d.c. 11 A / 11 A
Maximum short-circuit current (input A / input B)	d.c. 13.8 A / 13.8 A	d.c. 13.8 A / 13.8 A
Maximum input power	4000 W	6000 W
Maximum inverter backfeed current to the array	0 A	0 A
<b>Battery:</b>		
Battery type	Lithium	Lithium
Battery voltage range	d.c. 85...400 V	d.c. 85...400 V
Maximum charge / discharge current	d.c. 25 A	d.c. 25 A
<b>Grid output:</b>		
Grid connection type	Single-phase	Single-phase
Nominal voltage	a.c. 230 V	a.c. 230 V
Nominal frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
Rated output current	a.c. 13.1 A	a.c. 21.7 A
Maximum continuous current	a.c. 13.1 A	a.c. 21.7 A
Inrush current (peak and duration)	a.c. 30 A, 500 $\mu$ s	a.c. 45 A, 500 $\mu$ s
Rated output power	3000 W	4991 W
Maximum apparent power	3000 VA	4991 VA
Rated apparent power	3000 VA	4991 VA
Power factor range	0.8leading...0.8lagging	0.8leading...0.8lagging
Maximum output fault current (peak and duration)	a.c. 50 A, 5 $\mu$ s	a.c. 63 A, 5 $\mu$ s
Maximum output overcurrent protection	a.c. 25 A	a.c. 40 A
Maximum total harmonic distortion	< 3%	< 3%
<b>Grid input:</b>		
Nominal voltage	a.c. 230 V	a.c. 230 V
Nominal frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
Rated input current	a.c. 25 A	a.c. 40 A
Maximum continuous current	a.c. 25 A	a.c. 40 A
Inrush current (peak and duration)	a.c. 45 A, 500 $\mu$ s	a.c. 60 A, 500 $\mu$ s
Rated apparent power	5750 VA	9200 VA
Maximum apparent power	5750 VA	9200 VA
Power factor range	0.8leading...0.8lagging	0.8leading...0.8lagging

<b>Backup output:</b>		
Nominal voltage	a.c. 230 V	a.c. 230 V
Nominal frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
Rated current	a.c. 12.6 A	a.c. 20 A
Maximum continuous current	a.c. 12.6 A	a.c. 20 A
Inrush current (peak and duration)	a.c. 35 A, 200 $\mu$ s	a.c. 60 A, 200 $\mu$ s
Rated apparent power	2900 VA	4600 VA
Maximum apparent power	2900 VA	4600 VA
Maximum output fault current (peak and duration)	40 A, 5 $\mu$ s	63 A, 5 $\mu$ s
Maximum output overcurrent protection	25 A	40 A
Output THDv (@Linear Load)	< 3%	< 3%
<b>Efficiency:</b>		
Maximum efficiency	97.6%	
European weighted efficiency	97.2%	
MPPT efficiency	99.9%	
Maximum battery charge efficiency	98.2%	
Maximum battery discharge efficiency	96.8%	
<b>Decisive voltage classification:</b>		
PV port	DVC-C	
Battery port	DVC-C	
Grid port	DVC-C	
Backup port	DVC-C	
Communication port	DVC-A	
<b>Protection:</b>		
DC reverse polarity protection	Supported	
Insulation resistance detection	Supported	
Residual current monitoring	Supported	
Anti-islanding protection	Supported	
AC overcurrent protection	Supported	
AC short-circuit protection	Supported	
AC overvoltage protection	Supported	
Over temperature protection	Supported	
DC surge protection	Supported	
AC surge protection	Supported	
Over load protection	Supported	
<b>Communications:</b>		
Interface	Meter, BMS, Wi-Fi, DRM	
Meter protocol	RS485	
BMS protocol	CAN	
Display	LED indicators; WLAN+App	
Demand response mode	DRM 0	
<b>General Data:</b>		
Protective class	I	

Overvoltage category	DC II, AC III
Ingress protection	IP65
Operating temperature range	-25...+60 °C
Relative humidity range	0...100 %
Maximum operating altitude	2000 m
Pollution degree	PD3
Dimensions (W×H×D)	411×505×195 mm
Weight	18.6 kg
Mounting method	Wall-mounting bracket
Cooling method	Natural convection
Night-time power loss	< 10 W
Inverter topology	Non-isolated
Active anti-islanding method	Frequency shift
Country of manufacture	China
Warranty	7 years
<b>Standard compliance:</b>	
Safety	IEC 62109-1, IEC 62109-2
Grid connection standards	VDE-AR-N 4105, CEI 0-21, AS/NZS 4777.2, G98/99, UNE 217001, UNE 217002, NTS, RD 647,413,1699, EN50549-1, NL, C10/11...