

3.6kW to 6kW Grid-tied String Inverter

Optimal power

- Delivers 98.1% maximum efficiency with 15A PV input current per string and two integrated MPP trackers for performance

Strong load

- Provides 110% continuous AC output overloading with 60V startup voltage for extended low-light operation capabilities

Convenient install & operation

- Features plug-and-play terminals, OLED display, and app-based settings for simplified installation and efficient monitoring

Flexible design & use

- IP65-rated indoor and outdoor protection with compact dimensions and an elegant modern appearance design



Model	INS-SI-3.6K	INS-SI-5K	INS-SI-6K
PV Input			
Start-up voltage (V)	60		
Max. DC input voltage* (V)	600*		
Rated DC input voltage (V)	360		
MPPT voltage range* (V)	50-550*		
No. of MPP trackers	2		
No. of DC inputs per MPPT	1/1		
Max. input current (A)	15/15		
Max. short-circuit current (A)	20/20		
Max. PV input power (%)	200/200		

*PV max. input voltage is 450V, otherwise the inverter will be waiting

1) G98: 3.68kW; 2) G98: 3.68kVA; 3) G98: 16.00A; 4) VDE-AR-N 4105: 4.60kW;
 5) AS 4777.2: 5.0kW, VDE-AR-N 4105: 4.6kW; 6) VDE-AR-N 4105: 4.60kVA;
 7) AS 4777.2: 5.0kVA, VDE-AR-N 4105: 4.6kVA; 8) VDE-AR-N 4105: 20.00A;
 9) AS 4777.2: 21.7A, VDE-AR-N 4105: 20.0A;

Model	INS-SI-3.6K	INS-SI-5K	INS-SI-6K
Grid side			
Rated output power (kW)	3.60	5.00 ⁴⁾	6.00
Max. output power (kW)	3.96 ¹⁾	5.50 ⁵⁾	6.00
Rated output apparent power (kVA)	3.60	5.00 ⁶⁾	6.00
Max. output apparent power (kVA)	3.96 ²⁾	5.50 ⁷⁾	6.00
Rated AC voltage	L/N/PE; 220/230/240V		
Rated AC frequency (Hz)	50/60		
Rated output current (A)	15.70	21.70 ⁸⁾	26.10
Max. output current (A)	18.00 ³⁾	25.00 ⁹⁾	26.10
Power factor	0.8 leading ... 0.8 lagging		
Max. total harmonic distortion	<3% @ rated output power		
DCI	<0.5%In		

Model	INS-SI-3.6K	INS-SI-5K	INS-SI-6K
Efficiency			
Max. efficiency		98.15%	
European efficiency		97.5%	
MPPT efficiency		99.9%	
Protection			
DC reverse polarity protection			
Insulation resistance protection			
Surge protection			
Over-temperature protection			
Residual current protection		Integrated	
Islanding protection			
AC over-voltage protection			
Overload protection			
AC short-circuit protection			
General data			
Over Voltage Category		PV: II Main: III	
Dimensions (WxDxH mm)		358 x 300 x 158	
Weight (KG)		9.8	
Protection degree		IP65	
Self-consumption at night (W)		<1	
Topology		Transformerless	
Operating temp. range (°C)		-30~60	
Relative humidity (%)		0~100	
Operating altitude (m)		3000 (>3000m derating)	
Cooling		Natural convection	
Noise level (dB)		<25	
Display		OLED & LED	
MCB protection		16amp; 30mA Type-B bi-directional RCD	
Display		OLED & LED	
Cable recommendation		No less than 4mm twin & earth cable (cable length dependant)	