

# Specification for String PV Inverter 80 to 136 kW

**HITACHI**  
Inspire the Next

Hiverter Si 3 Phase with Eight to twelve MPPTs	Si-80K	Si-100K	Si-110K	Si-100K-HV	Si-125K-HV	Si-136K-HV
<b>Input (DC)</b>						
Max. input voltage	1100V					
Rated input voltage	625V	625V	625V	725V	725V	785V
Start-up voltage	200V					
MPPT operating voltage range	180V- 1000V					
Full power MPPT voltage range	500V-850V	500V-850V	500V-850V	550V-850V	550V-850V	550V-850V
Number of MPP trackers	8	10	10	10	10	12
Number for DC inputs	16	20	20	20	20	24
Max. input current per MPPT	26A					
Max. input short circuit current per MPPT	40A					
<b>Output (AC)</b>						
Rated power	80kW	100kW	110kW	100kW	125kW	136kW
Max. AC power	88kVA	110kVA	121 kVA	110kVA	137kVA	150kVA
Max. output current	128A	160A	175A	128A	160A	160A
Nominal grid voltage	3/N/PE, 230V/400Vac, 220V/380Vac			3/PE, 288V/500Vac	3/PE, 288V/500Vac	3/PE, 311V/540Vac
Grid voltage range	310Vac-480Vac			400Vac-575Vac	400Vac-575 Vac	432Vac-621Vac
Nominal frequency	50/60Hz					
Grid frequency range	45Hz-55Hz/54Hz-66Hz ( According to local standard )					
Active power adjustable range	0-100%					
TH Di	<3%					
Power factor	1 default (adjustable+/-0.8)					
<b>Performance</b>						
Max. Efficiency	98.60%	98.70%	98.75%	98.80%	98.95%	99.00%
European weighted efficiency	TBD	TBD	TBD	TBD	TBD	TBD
MPPT efficiency	TBD					
<b>Protection</b>						
DC reverse polarity protection	Yes					
Anti-islanding protection	Yes					
Leakage current protection	Yes					
Ground fault monitoring	Yes					
PV-array string fault monitoring	Yes					
Zero voltage ride through	Yes					
DC switch	Yes					
Anti-PID protection	Optional					
AFCI	Optional					
Protection class/ Overtoltage category	I/III					
Input/ Output SPD	PV: type II standard, AC: type II standard					
<b>Communication</b>						
Power management unit	According to certification and request					
Communication	RS485, Optional: Wi-Fi /GPRS /PLC					
Operation data storage	25 years					
<b>General Data</b>						
Ambient temperature range	-30°C— +60°C					
Topology	Transformerless					
Degree of protection	IP66					
Allowable relative humidity range	0-100%					
Max. operating altitude	4000m					
Noise	≤60 Db					
Weight	85kg	90kg	90kg	85kg	90kg	92kg
Cooling	Smart forced air cooling					
Dimension (mm)	995.5 x 693.5 x 368					
Display	LCD & Bluetooth + APP					
<b>Standard</b>						
EMC	EN 61000-6-2, EN 61000-6-4					
Safety standard	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)					

<b>Doc. No :-</b>	HH2EA00354	<b>HITACHI HIREL POWER ELECTRONICS PVT. LTD.</b>	<b>Prepared By :-</b>	<b>CDP</b>
<b>Rev. No :-</b>	<b>01</b>		<b>Checked By :-</b>	<b>RNP</b>
<b>Date :-</b>	<b>26.12.2020</b>		<b>Approved By :-</b>	<b>YP</b>
		<b>Page   1</b>		