

## HIVERTER-Si-4.4K

Three Phase, Dual-MPPT  
Grid Tied Solar String Inverter

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 2 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -25°C to 60°C
- IP 65 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Reactive power controller
- Type III SPD (Surge Protection Device)
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



### Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-1 IEC 61000-6-3 IEC 61000-6-2 IEC 61000-6-4

## Technical Specifications

Input (DC)		Si-4.4K
Recommended PV input power		4800W
Max DC power for single MPPT		4500W
Number for independent MPPT		2
Number for DC inputs		1 for each MPPT
Max. input voltage		1000V
Start-up input voltage		180V
Rated input voltage		600V
MPPT voltage range		160V-960V
Full load DC voltage range		190V-850V
Max. input MPPT current		11A/11A
Max. DC input short circuit current per MPPT		14A
Output (AC)		
Normal power		4000W
Max. AC power		4400VA
Max. output current		6.4A
Nominal grid voltage		3/N/PE, 220V/380Vac, 230V/400Vac, 240/415Vac
Grid voltage range		310Vac-480Vac (According to local standard)
Nominal frequency		50/60Hz
Grid frequency range		45Hz-55Hz/54Hz-66Hz (According to local standard)
Active power adjustable range		0-100%
THDi		<3%
Power factor		1 default (adjustable $\pm 0.8$ )
Power limit export		Zero export or adjustable power limit export
Performance		
Max. Efficiency up to		98.0%
European weighted efficiency up to		97.5%
Self-consumption at night		<1W
MPPT efficiency		>99.9%
Protection		
DC reverse polarity protection		Yes
DC switch		Yes
Safety protection		Anti islanding, RCMU, Ground fault monitoring
ARPC		Anti reverse power controller (optional)
Communication		
Power management unit		According to certification and request
Standard Communication mode		RS485, Wi-Fi / Ethernet / GPRS (optional) / SD card
Operation data storage		25 years
General Data		
Ambient temperature range		-25°C ~ +60°C
Topology		Transformer less
Degree of protection		IP65
Allowable relative humidity range		0-100%
Max. operating altitude		2000m
Noise		$\leq 29$ dB
Weight		21kg
Cooling		Natural
Dimension (mm)		457 x 452 x 202
Display		LCD display
Standard		
EMC		EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30), IEC60255
Grid standards		V 0126-1-1, EN50530

### Hitachi Hi-Rel Power Electronics Private Limited

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## HIVERTER-Si-5.5K

Three Phase, Dual-MPPT  
Grid Tied Solar String Inverter

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 2 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -25°C to 60°C
- IP 65 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Reactive power controller
- Type III SPD (Surge Protection Device)
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



### Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-1 IEC 61000-6-3 IEC 61000-6-2 IEC 61000-6-4

## Technical Specifications

Input (DC)		Si-5.5K
Recommended PV input power		6000W
Max DC power for single MPPT		5700W
Number for independent MPPT		2
Number for DC inputs		1 for each MPPT
Max. input voltage		1000V
Start-up input voltage		180V
Rated input voltage		600V
MPPT voltage range		160V-960V
Full load DC voltage range		240V-850V
Max. input MPPT current		11A/11A
Max. DC input short circuit current per MPPT		14A
Output (AC)		
Normal power		5000W
Max. AC power		5500VA
Max. output current		8.0A
Nominal grid voltage		3/N/PE, 220V/380Vac, 230V/400Vac, 240/415Vac
Grid voltage range		310Vac-480Vac (According to local standard)
Nominal frequency		50/60Hz
Grid frequency range		45Hz-55Hz/54Hz-66Hz (According to local standard)
Active power adjustable range		0-100%
THDi		<3%
Power factor		1 default (adjustable $\pm 0.8$ )
Power limit export		Zero export or adjustable power limit export
Performance		
Max. Efficiency up to		98.0%
European weighted efficiency up to		97.5%
Self-consumption at night		<1W
MPPT efficiency		>99.9%
Protection		
DC reverse polarity protection		Yes
DC switch		Yes
Safety protection		Anti islanding, RCMU, Ground fault monitoring
ARPC		Anti reverse power controller (optional)
Communication		
Power management unit		According to certification and request
Standard Communication mode		RS485, Wi-Fi / Ethernet / GPRS (optional) / SD card
Operation data storage		25 years
General Data		
Ambient temperature range		-25°C ~ +60°C
Topology		Transformer less
Degree of protection		IP65
Allowable relative humidity range		0-100%
Max. operating altitude		2000m
Noise		$\leq 29$ dB
Weight		21kg
Cooling		Natural
Dimension (mm)		457 x 452 x 202
Display		LCD display
Standard		
EMC		EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30), IEC60255
Grid standards		V 0126-1-1, EN50530

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## HIVERTER-Si-11K

Three Phase, Dual-MPPT  
Grid Tied Solar String Inverter

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 2 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -25°C to 60°C
- IP 65 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Reactive power controller
- Type III SPD (Surge Protection Device)
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



### Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-1 IEC 61000-6-3 IEC 61000-6-2 IEC 61000-6-4

## Technical Specifications

Input (DC)		Si-11K
Recommended PV input power		12000W
Max DC power for single MPPT		6200W
Number for independent MPPT		2
Number for DC inputs		1 for each MPPT
Max. input voltage		1000V
Start-up input voltage		180V
Rated input voltage		600V
MPPT voltage range		160V-960V
Full load DC voltage range		480V-850V
Max. input MPPT current		11A/11A
Max. DC input short circuit current per MPPT		14A
Output (AC)		
Normal power		10000W
Max. AC power		11000VA
Max. output current		15.9A
Nominal grid voltage		3/N/PE, 220V/380Vac, 230V/400Vac, 240/415Vac
Grid voltage range		310Vac-480Vac (According to local standard)
Nominal frequency		50/60Hz
Grid frequency range		45Hz-55Hz/54Hz-66Hz (According to local standard)
Active power adjustable range		0-100%
THDi		<3%
Power factor		1 default (adjustable $\pm 0.8$ )
Power limit export		Zero export or adjustable power limit export
Performance		
Max. Efficiency up to		98.3%
European weighted efficiency up to		98.0%
Self-consumption at night		<1W
MPPT efficiency		>99.9%
Protection		
DC reverse polarity protection		Yes
DC switch		Yes
Safety protection		Anti islanding, RCMU, Ground fault monitoring
ARPC		Anti reverse power controller (optional)
Communication		
Power management unit		According to certification and request
Standard Communication mode		RS485, Wi-Fi / Ethernet / GPRS (optional) / SD card
Operation data storage		25 years
General Data		
Ambient temperature range		-25°C ~ +60°C
Topology		Transformer less
Degree of protection		IP65
Allowable relative humidity range		0-100%
Max. operating altitude		2000m
Noise		$\leq 29$ dB
Weight		22kg
Cooling		Natural
Dimension (mm)		457 x 452 x 202
Display		LCD display
Standard		
EMC		EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30), IEC60255
Grid standards		V 0126-1-1, EN50530

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## HIVERTER-Si-20K

Three Phase, Dual-MPPT  
Grid Tied Solar String Inverter

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 2 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -25°C to 60°C
- IP 65 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Reactive power controller
- Type III SPD (Surge Protection Device)
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



### Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-2 IEC 61000-6-3 IEC 61000-3-11 IEC 61000-3-12

## Technical Specifications

Input (DC)		Si-20K
Recommended PV input power		26000W
Max DC power for single MPPT		13000W
Number for independent MPPT		2
Number for DC inputs		2 for each MPPT
Max. input voltage		1100V
Start-up input voltage		250V
Rated input voltage		620V
MPPT voltage range		230V-960V
Full load DC voltage range		480V-850V
Max. input MPPT current		24A/24A
Max. DC input short circuit current per MPPT		30A
Output (AC)		
Rated power		20000W
Max. AC power		22000VA
Max. output current		32A
Nominal grid voltage		3/N/PE, 220V/380Vac, 230V/400Vac, 240/415Vac
Grid voltage range		310Vac-480Vac (According to local standard)
Nominal frequency		50/60Hz
Grid frequency range		45Hz-55Hz/54Hz-66Hz (According to local standard)
Active power adjustable range		0-100%
THDi		<3%
Power factor		1 default (adjustable ±0.8)
Performance		
Max. Efficiency up to		98.2%
European weighted efficiency up to		98.0%
Self-consumption at night		<1W
MPPT efficiency		>99.9%
Protection		
DC reverse polarity protection		Yes
DC switch		Yes
Protection class/Overvoltage category		I/III
Safety protection		Anti islanding, RCMU, Ground fault monitoring
ARPC		Anti reverse power controller (optional)
Communication		
Power management unit		According to certification and request
Standard Communication mode		Rs485, Wi-Fi / Ethernet / GPRS (optional) / SD card
Operation data storage		25 years
General Data		
Ambient temperature range		-25°C ~ +60°C
Topology		Transformer less
Degree of protection		IP65
Allowable relative humidity range		0-100%
Max. operating altitude		2000m
Noise		≤30dB
Weight		37kg
Cooling		Natural
Dimension (mm)		666 x 512 x 254
Display		LCD display
Standard		
EMC		EN 61000-6-2, EN 61000-6-3, EN 61000-3-12, EN 61000-3-11
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)
Grid standards		V 0126-1-1, EN50530

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## HIVERTER-Si-30K

Three Phase, Dual-MPPT  
Grid Tied Solar String Inverter

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 2 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -25°C to 60°C
- IP 65 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Reactive power controller
- Type III SPD (Surge Protection Device)
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



### Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-2 IEC 61000-6-3 IEC 61000-3-11 IEC 61000-3-12

## Technical Specifications

Input (DC)		Si-30K
Recommended PV input power		39000W
Max DC power for single MPPT		18000W
Number for independent MPPT		2
Number for DC inputs		3 for each MPPT
Max. input voltage		1100V
Start-up input voltage		250V
Rated input voltage		620V
MPPT voltage range		230V-960V
Full load DC voltage range		520V-850V
Max. input MPPT current		30A/30A
Max. DC input short circuit current per MPPT		37.5A
Output (AC)		
Rated power		30000W
Max. AC power		33000VA
Max. output current		48A
Nominal grid voltage		3/N/PE, 220V/380Vac, 230V/400Vac, 240/415Vac
Grid voltage range		310Vac-480Vac (According to local standard)
Nominal frequency		50/60Hz
Grid frequency range		45Hz-55Hz/54Hz-66Hz (According to local standard)
Active power adjustable range		0-100%
THDi		<3%
Power factor		1 default (adjustable ±0.8)
Performance		
Max. Efficiency up to		98.4%
European weighted efficiency up to		98.2%
Self-consumption at night		<1W
MPPT efficiency		>99.9%
Protection		
DC reverse polarity protection		Yes
DC switch		Yes
Protection class/Overvoltage category		I/III
Safety protection		Anti islanding, RCMU, Ground fault monitoring
ARPC		Anti reverse power controller (optional)
Communication		
Power management unit		According to certification and request
Standard Communication mode		Same as 20K
Operation data storage		25 years
General Data		
Ambient temperature range		-25°C ~ +60°C
Topology		Transformer less
Degree of protection		IP65
Allowable relative humidity range		0-100%
Max. operating altitude		2000m
Noise		≤45dB
Weight		37kg
Cooling		Fan
Dimension (mm)		666 x 512 x 254
Display		LCD display
Standard		
EMC		EN 61000-6-2, EN 61000-6-3, EN 61000-3-12, EN 61000-3-11
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)
Grid standards		V 0126-1-1, EN50530

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## HIVERTER-Si-50K

Three Phase, Multi-MPPT  
Grid Tied Solar String Inverter

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 3 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -25°C to 60°C
- IP 65 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Reactive power controller
- Type II SPD
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



### Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-2 IEC 61000-6-4 IEC 61000-3-11 IEC 61000-3-12

## Technical Specifications

Input (DC)		Si-50K
Recommended PV input power		55000W
Max DC power for single MPPT		22000W/16000W/16000W
Number for independent MPPT		3
Number for DC inputs		4/3/3
Max. input voltage		1000V
Start-up input voltage		350V
Rated input voltage		600V
MPPT voltage range		250V-950V
Full load DC voltage range		530V-800V
Max. input MPPT current		40A/30A/30A
Max. input current per string		12A
Max. DC input short circuit current per MPPT		48A/36A/36A
Output (AC)		
Rated power		50000W
Max. AC power		50000VA
Max. output current		80A
Nominal grid voltage		3/N/PE, 220V/380Vac, 230V/400Vac, 240/415Vac
Grid voltage range		310Vac-220Vac (According to local standard)
Nominal frequency		50/60Hz
Grid frequency range		45Hz-55Hz/54Hz-66Hz (According to local standard)
Active power adjustable range		0-100%
THDi		<3%
Power factor		1 default (adjustable ±0.8)
Performance		
Max. Efficiency up to		98.5%
European weighted efficiency up to		98.3%
Self-consumption at night		<1W
MPPT efficiency		>99.9%
Protection		
DC reverse polarity protection		Yes
DC switch		Yes
Protection class/Overvoltage category		I/III
Input/ output SPD		PV: type II standard, AC: type II
Safety protection		Anti islanding, RCMU, Ground fault monitoring
ARPC		Anti reverse power controller (optional)
Communication		
Power management unit		According to certification and request
Standard Communication mode		RS485, Wifi / Ethernet / GPRS(optional), SD card, Multi-function relay
Operation data storage		25 years
General Data		
Ambient temperature range		-25°C ~ +60°C
Topology		Transformer less
Degree of protection		IP65
Allowable relative humidity range		0-100%
Max. operating altitude		4000m
Noise		≤60dB
Weight		68kg
Cooling		Fan
Dimension (mm)		713 x737 x 297
Display		LCD display
Standard		
EMC		EN 61000-6-2, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)
Grid standards		V 0126-1-1, EN50530

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## HIVERTER-Si-80K

Three Phase, Multi-MPPT  
Grid Tied Solar String Inverter

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 8 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -30°C to 60°C
- IP 66 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Reactive power controller
- Type II SPD (Surge Protection Device)
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



### Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-2 IEC 61000-6-4

## Technical Specifications

Input (DC)		Si-80K
Max. input voltage		1100V
Rated input voltage		625V
Start-up voltage		200V
MPPT operating voltage range		180V-1000V
Full power MPPT voltage range		500V-850V
Number of MPP trackers		8
Number for DC inputs		16
Max. input current per MPPT		26A
Max. input short circuit current per MPPT		40A
Output (AC)		
Rated power		80kW
Max. AC power		88kVA
Max. output current		128A
Nominal grid voltage		3/N/PE, 230V/400Vac, 220V/380Vac
Grid voltage range		310Vac-480Vac
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 $\pm 0.8$ )
Performance		
Max. Efficiency up to		98.60%
European weighted efficiency up to		98.20%
MPPT efficiency		>99.9%
Protection		
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/Overvoltage category		I/III
Input/Output SPD		PV: type II standard, AC: type II standard
Communication		
Power management unit		According to certification and request
Communication		RS485, Optional: Wi-Fi /GPRS /PLC
Operation data storage		25 years
General Data		
Ambient temperature range		-30°C ~ +60°C
Topology		Transformer less
Degree of protection		IP66
Allowable relative humidity range		0-100%
Max. operating altitude		4000m
Noise		$\leq 60$ Db
Weight		85kg
Cooling		Smart forced air cooling
Dimension (mm)		995.5 x 663.5 x 368
Display		LCD & Bluetooth + APP
Standard		
EMC		EN 61000-6-2, EN 61000-6-4
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)

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## HIVERTER-Si-100K

Three Phase, Multi-MPPT  
Grid Tied Solar String Inverter

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 10 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -30°C to 60°C
- IP 66 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Reactive power controller
- Type II SPD (Surge Protection Device)
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



### Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-2 IEC 61000-6-4

## Technical Specifications

Input (DC)		Si-100K
Max. input voltage		1100V
Rated input voltage		625V
Start-up voltage		200V
MPPT operating voltage range		180V-1000V
Full power MPPT voltage range		500V-850V
Number of MPP trackers		10
Number for DC inputs		20
Max. input current per MPPT		26A
Max. input short circuit current per MPPT		40A
Output (AC)		
Rated power		100kW
Max. AC power		110kVA
Max. output current		160A
Nominal grid voltage		3/N/PE, 230V/400Vac, 220V/380Vac
Grid voltage range		310Vac-480Vac
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 $\pm 0.8$ )
Performance		
Max. Efficiency up to		98.70%
European weighted efficiency up to		98.30%
MPPT efficiency		>99.9%
Protection		
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/Overtvoltage category		I/III
Input/Output SPD		PV: type II standard, AC: type II standard
Communication		
Power management unit		According to certification and request
Communication		RS485, Optional: Wi-Fi /GPRS /PLC
Operation data storage		25 years
General Data		
Ambient temperature range		-30°C ~ +60°C
Topology		Transformer less
Degree of protection		IP66
Allowable relative humidity range		0-100%
Max. operating altitude		4000m
Noise		$\leq 60$ Db
Weight		90kg
Cooling		Smart forced air cooling
Dimension (mm)		995.5 x 663.5 x 368
Display		LCD & Bluetooth + APP
Standard		
EMC		EN 61000-6-2, EN 61000-6-4
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)

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## HIVERTER-Si-110K

Three Phase, Multi-MPPT  
Grid Tied Solar String Inverter

### Key Features

- Wide DC input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 10 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -30°C to 60°C
- IP 66 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Reactive power controller
- Type II SPD (Surge Protection Device)
- String current monitoring
- Low Voltage Ride Through (LVRT) compliance
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



### Technical Standards

No.	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-2 IEC 61000-6-4

## Technical Specifications

Input (DC)		Si-110K
Max. input voltage		1100V
Rated input voltage		625V
Start-up voltage		200V
MPPT operating voltage range		180V-1000V
Full power MPPT voltage range		550V-850V
Number of MPP trackers		10
Number for DC inputs		20
Max. input current per MPPT		26A
Max. input short circuit current per MPPT		40A
Output (AC)		
Rated power		110kW
Max. AC power		121kVA
Max. output current		175A
Nominal grid voltage		3/N/PE, 230V/400Vac, 220V/380Vac
Grid voltage range		310Vac-480Vac
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 $\pm 0.8$ )
Performance		
Max. Efficiency up to		98.75%
European weighted efficiency up to		98.40%
MPPT efficiency		>99.9%
Protection		
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/Overtvoltage category		I/III
Input/Output SPD		PV: type II standard, AC: type II standard
Communication		
Power management unit		According to certification and request
Communication		RS485, Optional: Wi-Fi /GPRS /PLC
Operation data storage		25 years
General Data		
Ambient temperature range		-30°C ~ +60°C
Topology		Transformer less
Degree of protection		IP66
Allowable relative humidity range		0-100%
Max. operating altitude		4000m
Noise		$\leq 60$ Db
Weight		90kg
Cooling		Smart forced air cooling
Dimension (mm)		995.5 x 663.5 x 368
Display		LCD & Bluetooth + APP
Standard		
EMC		EN 61000-6-2, EN 61000-6-4
Safety standard		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)

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