



DHI SERIES



DIHS

Max. efficiency up to 97.6%

With AC output ranging from 3kW to 8kW

100~500V super wide battery voltage range, adapt to bigger capacity battery

Up to 30A charging and discharging current allows bigger capacity battery accessing and faster charging

Powerful load adaptability, support multiple loads stable access

Oled display+App two ways for data checking and management

Intelligent EMS management, power dispatching from PV, Battery and Grid is more flexible

Uninterruptible power supply, switch to off-grid mode within 10ms

DIHT

Max. efficiency up to 98.2%

Support unbalance output on both on-grid and back-up side

180~750V super wide battery voltage range, adapt to bigger capacity battery

New pin type AC connector introduced, easy to use and safer

Model Name

Single phase

Model Name	DIHS-P3	DIHS-P3.6	DIHS-P4.2	DIHSS-P4.6
Inverter Model	DIHS-P3	DIHS-P3.6	DIHS-P4.2	DIHSS-P4.6
Max. Input Power (W)	3,900	4,680	5,460	5,980
Start-up Voltage (V)	80	80	80	80
Max. DC Input Voltage (V)	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360
MPPT Voltage Range (V)	100-550	100-550	100-550	100-550
No. of MPP Trackers	2	2	2	2
No. of PV Inputs per MPPT	1/1	1/1	1/1	1/1
Max. Input Current (A)	15/15	15/15	15/15	15/15
Max. Short-circuit Current (A)	20/20	20/20	20/20	20/20
Battery Type	Lithium Battery (with BMS)			
Battery Communication Mode	CAN/RS485			
Battery Voltage Range (V)	85-465			
Max. Charge/Discharge Current (A)	30/30			
Rated Current of Built-in Fuse (A)	63			
Rated Output Power (W)	3,000	3,600	4,200	4,600
Max. Output Power (W)	3,300	3,960	4,600	4,600
Max. Apparent Power (VA)	3,300	3,960	4,600	4,600
Max. Input Apparent Power (VA)	6000 ^②	7200 ^②	8400 ^②	9200 ^②
Max. Charging Power of Battery (W)	3,000	3,600	4,200	4,600
Rated Output Voltage (V)	L/N/PE, 220/230/240V			
Rated AC Frequency (Hz)	50/60			
Max. Output Current (A)	15	18	21	21
Power Factor	0.8 leading...0.8 lagging			
Max. Total Harmonic Distortion	<3% @ Rated Output Power			
DCI	<0.5%In			
UPS Switching	Time<10ms			
Rated Output Voltage (V)	L/N/PE, 220/230/240V			
Rated AC Frequency (Hz)	50/60			
Max. Apparent Output Power (VA)	3,300	3,960	4,600	4,600
Peak Overload Apparent Power (VA)	6,000 ^③ , 60s	7,200 ^③ , 60s	8,400 ^③ , 60s	9,200 ^③ , 60s
Voltage Harmonic Distortion	<3% @ Linear Load			
Max. Efficiency	97.60%	97.60%	97.60%	97.60%
European Efficiency	97.00%	97.00%	97.00%	97.00%
Max. Battery Charging Conversion Efficiency	96.60%	96.60%	96.60%	96.60%
Max. Battery Discharge Conversion Efficiency	96.60%	96.60%	96.60%	96.60%

Model Name

Single phase

Inverter Model	DIHS-P5	DIHS-P6	DIHS-P7	DIHS-P8
Max. Input Power (W)	6,500	7,800	9,100	10,400
Start-up Voltage (V)	80	80	80	80
Max. DC Input Voltage (V)	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360
MPPT Voltage Range (V)	100-550	100-550	100-550	100-550
No. of MPP Trackers	2	2	2	2
No. of PV Inputs per MPPT	1/1	1/1	1/1	1/1
Max. Input Current (A)	15/15	15/15	15/15	15/15
Max. Short-circuit Current (A)	20/20	20/20	20/20	20/20
Battery Type	Lithium Battery (with BMS)			
Battery Communication Mode	CAN/RS485			
Battery Voltage Range (V)	85-465			
Max. Charge/Discharge Current (A)	30/30			
Rated Current of Built-in Fuse (A)	63			
Rated Output Power (W)	5,000/4,990 ^①	6,000	7,000	8,000
Max. Output Power (W)	5,000/4,990 ^①	6,000	7,000	8,000
Max. Apparent Power (VA)	5,000/4,990 ^①	6,000	7,000	8,000
Max. Input Apparent Power (VA)	10,000 ^②	11,000 ^②	11,000 ^②	11,000 ^②
Max. Charging Power of Battery (W)	5,000/4,990 ^①	6,000	7,000	8,000
Rated Output Voltage (V)	L/N/PE,220/230/240V			
Rated AC Frequency (Hz)	50/60			
Max. Output Current (A)	25/21.7 ^①	28.7	35	36.3
Power Factor	0.8 leading...0.8 lagging			
Max. Total Harmonic Distortion	<3% @ Rated Output Power			
DCI	<0.5%In			
UPS Switching	Time<10ms			
Rated Output Voltage (V)	L/N/PE,220/230/240V			
Rated AC Frequency (Hz)	50/60			
Max. Apparent Output Power (VA)	5,500/4,990 ^①	8,800	11,000	13,200
Peak Overload Apparent Power (VA)	10,000 ^③ , 60s	10,000 ^③ , 60s	10,000 ^③ , 60s	10,000 ^③ , 60s
Voltage Harmonic Distortion	<3% @ Linear Load			
Max. Efficiency	97.60%	97.60%	97.60%	97.60%
European Efficiency	97.00%	97.00%	97.00%	97.00%
Max. Battery Charging Conversion Efficiency	96.60%	96.60%	96.60%	96.60%
Max. Battery Discharge Conversion Efficiency	96.60%	96.60%	96.60%	96.60%

Protection

DC Reverse Polarity Protection Integrated	Integrated
Battery Input Reverse Connection Protection	Integrated
Insulation Resistance Protection	Integrated
DC Switch	Integrated
Surge Protection	Integrated (Type II AC/DC)
Over-temperature Protection	Integrated
Residual Current Protection Integrated	Integrated
Islanding Protection	Frequency Shift, Integrated
AC Over-voltage	Integrated
Overload Protection	Integrated
AC Short-circuit Protection	Integrated

General Data

Over Voltage Category	PV: II ;Main: III
Dimensions (mm)	550W*410H*175D
Weight (kg)	26
Protection Degree	IP65
Self-consumption at Night	<15
Topology	Transformer less
Operating Temperature Range(°C)	-30~60
Relative Humidity(%)	0~100
Operating Altitude (m)	4000(derating@>3000)
Cooling	Natural Convection
Noise Level (dB)	<25
Display	OLED&LED
Communication	WiFi/ LAN (Optional)
Compliance	IEC62109、IEC62116、VDE4105、VDE0126、AS4777、RD1699、NBR16149、IEC61727、IEC60068、IEC61683、EN50549、EN61000

- 1, Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery.
- 2, The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is relating to the overload power.
- 3, Peak output apparent of power per phase is the max output apparent power that won't trigger the overload protection.

Model Name**Three phase**

	DIHT-P4	DIHT-P5	DIHT-P6
Inverter Model	DIHT-P4	DIHT-P5	DIHT-P6
Max. Input Power (W)	5,200	6,500	7,800
Start-up Voltage (V)	150	150	180
Max. DC Input Voltage (V)	1,000	1,000	1,000
Rated DC Input Voltage (V)	620	620	620
MPPT Voltage Range (V)	150-850	150-850	200-850
No. of MPP Trackers	2	2	2
No. of PV Inputs per MPPT	1/1	1/1	1/1
Max. Input Current (A)	13/13	13/13	13/13
Max. Short-circuit Current (A)	18/18	18/18	18/18
Battery Type		Lithium Battery (with BMS)	
Battery Communication Mode		CAN/RS485	
Battery Voltage Range (V)		135-750	
Max. Charge/Discharge Current (A)		25/25	
Rated Current of Built-in Fuse (A)		63	
Rated Output Power (W)	4,000	5,000	6,000
Max. Output Power (W)	4,400	5,500	6,600
Max. Apparent Power (VA)	4,400	5,500	6,600
Max. Input Apparent Power (VA)	8000 ^②	10000 ^②	12000 ^②
Max. Charging Power of Battery (W)	4,000	5,000	6,000
Rated Output Voltage (V)		3L/N/PE, 220/230/240V	
Rated AC Frequency (Hz)		50/60Hz 45-55Hz/55-65Hz	
Max. Output Current (A)	6.7	8.3	10
Power Factor		0.8 leading...0.8 lagging	
Max. Total Harmonic Distortion		<3% @ Rated Output Power	
DCI		<0.5%In	
UPS Switching Time		<10ms	
Rated Output Voltage (V)		3L/N/PE, 230/400V	
Rated AC Frequency (Hz)		50/60Hz 45-55Hz/55-65Hz	
Max. Apparent Output Power (VA)	4,400	5,500	6,600
Peak Overload Apparent Power (VA)	8,000 ^③ , 60s	10,000 ^③ , 60s	12,000 ^③ , 60s
Peak Overload Apparent Power (VA)	1600 ^③	2100 ^③	2600 ^③
Voltage Harmonic Distortion		<3% @ Linear Load	
Max. Efficiency	98.10%	98.10%	98.10%
European Efficiency	97.30%	97.30%	97.30%
Max. Battery Charging Conversion Efficiency	97.20%	97.20%	97.20%
Max. Battery Discharge Conversion Efficiency	97.20%	97.20%	97.20%

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Model Name

Three phase

	DIHT-P8	DIHT-P10	DIHT-P12
Inverter Model	DIHT-P8	DIHT-P10	DIHT-P12
Max. Input Power (W)	10,400	13,000	15,600
Start-up Voltage (V)	180	180	180
Max. DC Input Voltage (V)	1,000	1,000	1,000
Rated DC Input Voltage (V)	620	620	620
MPPT Voltage Range (V)	200-850	200-850	200-850
No. of MPP Trackers	2	2	2
No. of PV Inputs per MPPT	1/1	1/1	1/1
Max. Input Current (A)	13/13	13/13	13/13
Max. Short-circuit Current (A)	18/18	18/18	18/18
Battery Type		Lithium Battery (with BMS)	
Battery Communication Mode		CAN/RS485	
Battery Voltage Range (V)		135-750	
Max. Charge/Discharge Current (A)		25/25	
Rated Current of Built-in Fuse (A)		63	
Rated Output Power (W)	8,000	10,000	12,000
Max. Output Power (W)	8,800	11,000	13,200
Max. Apparent Power (VA)	8,800	11,000	13,200
Max. Input Apparent Power (VA)	16000 ^②	16500 ^②	16500 ^②
Max. Charging Power of Battery (W)	8,000	10,000	12,000
Rated Output Voltage (V)		3L/N/PE, 220/230/240V	
Rated AC Frequency (Hz)		50/60Hz 45-55Hz/55-65Hz	
Max. Output Current (A)	6.7	8.3	10
Power Factor		0.8 leading...0.8 lagging	
Max. Total Harmonic Distortion		<3% @ Rated Output Power	
DCI		<0.5%In	
UPS Switching Time		<10ms	
Rated Output Voltage (V)		3L/N/PE, 230/400V	
Rated AC Frequency (Hz)		50/60Hz 45-55Hz/55-65Hz	
Max. Apparent Output Power (VA)	4,400	5,500	6,600
Peak Overload Apparent Power (VA)	8,000 ^③ , 60s	10,000 ^③ , 60s	12,000 ^③ , 60s
Peak Overload Apparent Power (VA)	1600 ^③	2100 ^③	2600 ^③
Voltage Harmonic Distortion		<3% @ Linear Load	
Max. Efficiency	98.10%	98.10%	98.10%
European Efficiency	97.30%	97.30%	97.30%
Max. Battery Charging Conversion Efficiency	97.20%	97.20%	97.20%
Max. Battery Discharge Conversion Efficiency	97.20%	97.20%	97.20%

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Protection

DC Reverse Polarity Protection	Integrated
Battery Input Reverse Connection Protection	Integrated
Insulation Resistance Protection	Integrated
DC Switch	Integrated
Surge Protection	Integrated (Type/AC/DC)
Over-temperature Protection	Integrated
Residual Current Protection	Integrated
Islanding Protection	Frequency Shift, Integrated
AC Over-voltage	Integrated
Overload Protection	Integrated
AC Short-circuit Protection	Integrated

General Data

Dimensions (mm)	550W*410H*175D
Weight (kg)	26~28
Protection Degree	IP65
Self-consumption at Night	<15
Topology	Transformer less
Operating Temperature Range(°C)	-30~60
Relative Humidity(%)	0~100
Operating Altitude (m)	4000(derating@>3000)
Cooling	Natural Convection
Noise Level (dB)	<25
Display	OLED&LED
Communication	RS485 WiFi / LAN (Optional)
Compliance	IEC62109、IEC62116、VDE4105、VDE0126、AS4777、RD1699、NBR16149、IEC61727、IEC60068、IEC61683、EN50549、EN61000

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- 2,The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is relating to the overload power.
- 3,Peak output apparent of power per phase is the max output apparent power that won't trigger the overload protection.