

All-In-One (HV) (5-20) kW

**Smarter Power Better Life** 





# ALL-IN-ONE 5-20kW

**Compared With Separate Installation** 



# All-in-one

after-sales service

- 10-year warranty. Replace new machines instead of repairing.\*
- · No need to worry about after-sales between inverters and batteries of different brands.
- \* For critical parts quality issues

Saves

20% space

- •• Integrated humanized design, removed redundant cables.
- · · Adds points to beauty and attractiveness.





20% reduction in installation time

- Stack installation with Plug & Play connection.
- Makes the installation process time-saving, cost-effective and worry-free.

#### Integrated AC Charger, **Plug & Play**

Charging electric vehicles with clean energy, effectively save charging costs.



# All-in-one System Three Phase (HV) (5-10) kW

Type Designation	All-in-one sys-5kW-TH	All-in-one sys-6kW-TH	All-in-one sys-8kW-TH	All-in-one sys-10kW-
PV (input)				
Max. recommended PV array power [Wp]	7500	9000	12000	15000
Max. PV input voltage [V]		10	00	
Rated PV input voltage [V]		60		
Start-up input voltage [V]		18		
MPPT voltage range [V]		150-	950	- 4 4
No. of MPPT/Strings per MPPT		2 (1/1)		2 (1/2)
Max. PV input current [A]  Max. DC short-circuit current [A]		32 (16/16) 40 (20/20)		48 (16/32) 60 (20/40)
		40 (20/20)		00 (20/40)
Battery				
Battery type	Li-ion battery			
Max. charge/discharge current [A]	30/30			
Nominal voltage range [V]	192-512 (64 per module)			
Nominal capacity range Number of connectable modules	9.6 kWh-25.6 kWh (3.2 kWh / 50 Ah per module)  3-8 modules			
		3-0 1110	Juules	
Backup (output)				
Rated output power (off-grid mode)	5000W/5000VA	6000W/6000VA	8000W/8000VA	10000W/10000VA
Peak output power (off-grid mode)	6000VA,5min/10000VA, 10s	7200VA,5min/10000VA, 10s	12000VA, 5min	12000VA, 5min
Max. output power (on-grid mode) [VA]	5500	6600	8800	11000
Max. output current (on-grid mode) [A]	8.4	10	13.3	16.7
Backup switching time [ms]	<10			
Rated voltage [V]	3/N/PE 220/380; 230/400; 240/415 (±2%)			
Frequency range [Hz] Fotal harmonic distortion	50/60 (±0.5%)			
THDv, rated power, linear load) [%]	≤2			
Grid (input/output)				
Max. AC power from grid [VA]	12500	15000	18600	20600
Rated AC output power [W]	5000	6000	8000	10000
Max. AC output power [VA]	5500	6600	8800	11000
Max. AC output current [A]	8.4	10	13.3	16.7
Rated AC voltage [V]	3/N/PE 220/380; 230/400; 240/415			
AC voltage range [V]	270-480			
Rated grid frequency [Hz]		50/		
Grid frequency range [Hz]		45-55/	55-65	
Grid frequency range [Hz] Total harmonic distortion (THDi, rated power) [%]		45-55 <i>/</i>	55-65 3	
Grid frequency range [Hz]		45-55/	55-65 3	
Grid frequency range [Hz] Total harmonic distortion (THDi, rated power) [%] Power factor at rated power/		45-55 <i>/</i>	55-65 3	
Grid frequency range [Hz] Total harmonic distortion (THDi, rated power) [%] Power factor at rated power/ Adjustable power factor <b>Effciency</b>	98.00/97.20	45-55 <i>/</i>	55-65 3 Ig to 0.8 lagging	/97.90
Grid frequency range [Hz] Total harmonic distortion (THDi, rated power) [%] Power factor at rated power/ Adjustable power factor		45-55/ < > 0.99/0.8.leadir	55-65 3 Ig to 0.8 lagging	/97.90
Grid frequency range [Hz] Total harmonic distortion (THDi, rated power) [%] Power factor at rated power/ Adjustable power factor  Effciency  Max. effciency/European effciency [%]  Protection & Function		45-55/ < > 0.99/0.8.leadir 98.20/97.50	55-65 3 ig to 0.8 lagging 98.40	/97.90
Grid frequency range [Hz] Total harmonic distortion (THDi, rated power) [%] Power factor at rated power/ Adjustable power factor  Effciency  Max. effciency/European effciency [%]  Protection & Function  Parallel*		45-55/ < > 0.99/0.8.leadir 98.20/97.50 Master-sla	95-65 3 ng to 0.8 lagging 98.40 ave mode	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Surge protection		45-55/ < > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D	55-65 3 ig to 0.8 lagging 98.40 ave mode C and AC	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Eurge protection  Overvoltage category		45-55/ < > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D	98.40 ave mode C and AC d III AC	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Surge protection  Overvoltage category  Protective class		45-55/ < > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an	98.40 sive mode C and AC d III AC	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Surge protection  Divervoltage category  Protective class  Gird monitoring		45-55/ < > 0.99/0.8.leadir 98.20/97.50  Master-sla Type II, D  II DC an  Cla  Ye	98.40 98.40 ave mode C and AC d III AC	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Europe protection  Divervoltage category  Protective class  Gird monitoring  Diverse polarity protection		45-55/ < > 0.99/0.8.leadir 98.20/97.50  Master-sla Type II, D II DC an Cla Ye	98.40 98.40 98.40 ave mode C and AC d III AC ess I	/97.90
Grid frequency range [Hz] Total harmonic distortion (THDi, rated power) [%] Power factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection  Overvoltage category  Protective class Gird monitoring DC reverse polarity protection  Battery input reverse polarity protection		45-55/ < > 0.99/0.8.leadir 98.20/97.50  Master-sla Type II, D  II DC an  Cla  Ye  Ye  Ye	98.40 98.40 98.40 98.40  98.40  Output  Output	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Efficiency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Europe protection  Divervoltage category  Protective class  Gird monitoring  Diverse polarity protection		45-55/ < > 0.99/0.8.leadir 98.20/97.50  Master-sla Type II, D II DC an Cla Ye	98.40 98.40 98.40 98.40  98.40  98.40  98.40	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection  Divervoltage category  Protective class Gird monitoring  Diverse polarity protection  Battery input reverse polarity protection  nsulation monitoring		45-55/ < > 0.99/0.8.leadir  98.20/97.50  Master-sl.  Type II, D  II DC an  Cla  Ye  Ye  Ye  Ye	98.40 98.40 98.40  ave mode C and AC d III AC sss I ss sss ss	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection  Devervoltage category  Protective class Gird monitoring DC reverse polarity protection Battery input reverse polarity protection Insulation monitoring AC short-circuit protection		45-55/ < > 0.99/0.8.leadir  98.20/97.50  Master-sla  Type II, D  II DC an  Cla  Ye  Ye  Ye  Ye  Ye	98.40 98.40 98.40  Output  Out	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection  Overvoltage category  Protective class Gird monitoring OC reverse polarity protection  Battery input reverse polarity protection  nsulation monitoring AC short-circuit protection  Residual current protection  OC switch (PV)		45-55/ < > 0.99/0.8.leadir  98.20/97.50  Master-sl, Type II, D II DC an Cla Ye Ye Ye Ye Ye	98.40 98.40 98.40 98.40  98.40  98.40  98.40  98.40  98.40	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Europe protection  Dervoltage category  Protective class  Gird monitoring  De reverse polarity protection  Battery input reverse polarity protection  Insulation monitoring  AC short-circuit protection  Residual current protection  Co switch (PV)  Dever-heat protection		45-55/ > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye <	98.40 98.40 98.40 98.40 98.40  98.40  98.40  98.5 98.5 98.5 98.5 98.5 98.5 98.5 98.	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Surge protection  Overvoltage category  Protective class Gird monitoring OC reverse polarity protection  Battery input reverse polarity protection  assulation monitoring AC short-circuit protection  Residual current protection  OC switch (PV)  Over-heat protection  AFCI		45-55/ > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye <	98.40 98.40 98.40 98.40 98.40  98.40  98.40  98.5 98.5 98.5 98.5 98.5 98.5 98.5 98.	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection  Devervoltage category  Protective class Sirid monitoring DC reverse polarity protection Battery input reverse polarity protection Insulation monitoring AC short-circuit protection Residual current protection  Cover-heat protection  AFCI  General Data		45-55/ > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye <	98.40 98.40 98.40 98.40  98.40  Output  Output	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Europe protection  Dervoltage category  Protective class Eird monitoring DC reverse polarity protection Battery input reverse polarity protection Insulation monitoring AC short-circuit protection Residual current protection DC switch (PV) Dover-heat protection  AFCI  General Data  Fopology (PV/Battery)		45-55/ > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye OI	98.40  98.40  98.40  98.40  98.40  AC  Gard AC  Gard III AC  SS I  SS  SS  SS  SS  SS  SS  SS  SS	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Europe protection  Dervoltage category  Protective class Eirid monitoring DC reverse polarity protection Battery input reverse polarity protection Insulation monitoring AC short-circuit protection Residual current protection DC switch (PV) DVer-heat protection  AFCI  General Data  Topology (PV/Battery) Degree of protection		45-55/ > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye <	98.40 98.40 98.40 98.40  98.40	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Europe protection  Describe category  Protective class Eird monitoring Eattery input reverse polarity protection Ensulation monitoring EAC short-circuit protection  Residual current protection  Exercise category  Describe class  Enterny input reverse polarity protection  Eattery input reverse polarity protection  Eattery input reverse polarity protection  Eaction monitoring  EAC short-circuit protection  Exercise Company  Exer		45-55/	98.40  98	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Surge protection  Overvoltage category  Protective class  Gird monitoring  OC reverse polarity protection  Battery input reverse polarity protection  nsulation monitoring  AC short-circuit protection  Residual current protection  Co switch (PV)  Over-heat protection  AFCI  General Data  Topology (PV/Battery)  Degree of protection  Dimensions (W*H*D) [mm]  Weight [kg]  Mounting method		45-55/  > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye <td>98.40  98</td> <td>/97.90</td>	98.40  98	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection  Dervoltage category  Protective class Gird monitoring DC reverse polarity protection Battery input reverse polarity protection Insulation monitoring AC short-circuit protection Residual current protection Residual current protection  Residual current protection  Residual current protection  DC switch (PV) Deer-heat protection  AFCI  General Data  Topology (PV/Battery) Degree of protection  Dimensions (w*H*D) [mm]  Weight [kg] Mounting method  Deparating ambient temperature range [°C]		45-55/  > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye Ye Ye Ye Ye Ye Of Transfor IPO 640*1012*360 (With <147 (With 3 Ba Floor-st -25-60 (Derati	98.40  98	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Surge protection  Devervoltage category  Protective class Grid monitoring  De reverse polarity protection  Battery input reverse polarity protection  nsulation monitoring  AC short-circuit protection  Residual current protection  Des switch (PV)  Dever-heat protection  General Data  Fopology (PV/Battery)  Degree of protection  Dimensions (W*H*D) [mm]  Weight [kg]  Mounting method  Deparating ambient temperature range [°C]  Storage temperature [°C]		45-55/	98.40  98	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection  Devervoltage category  Protective class Gird monitoring DC reverse polarity protection Battery input reverse polarity protection nsulation monitoring AC short-circuit protection Residual current protection DC switch (PV) Dever-heat protection  AFCI  General Data  Topology (PV/Battery) Degree of protection Dimensions (W*H*D) [mm]  Weight [kg] Mounting method Deparating ambient temperature range [°C] Storage temperature [°C] Allowable relative humidity range [%]		45-55/  > 0.99/0.8.leadir  98.20/97.50  Master-sla  Type II, D  II DC an  Cla  Ye  Ye  Ye  Ye  Ye  10  Transfor  IP  640*1012*360 (With  <147 (With 3 Ba  Floor-st  -20-45 (<1 Month)/	98.40  98	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection Devervoltage category  Protective class Gird monitoring DC reverse polarity protection Battery input reverse polarity protection Insulation monitoring AC short-circuit protection Residual current protection  Residual current protection  General Data  Fopology (PV/Battery) Degree of protection Dimensions (W*H*D) [mm]  Weight [kg] Mounting method Degrating ambient temperature range [°C] Storage temperature [°C] Allowable relative humidity range [%] Cooling method		45-55/  > 0.99/0.8.leadir  98.20/97.50  Master-sla  Type II, D  II DC an  Cla  Ye  Ye  Ye  Ye  Ye  Ye  Ye  Ye  Ye  Y	98.40  98	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection  Devervoltage category  Protective class Gird monitoring DC reverse polarity protection Battery input reverse polarity protection Insulation monitoring AC short-circuit protection Residual current protection  Residual current protection  AFCI  General Data  Topology (PV/Battery) Degree of protection Dimensions (W*H*D) [mm]  Weight [kg] Mounting method Deparating ambient temperature range [°C]  Storage temperature [°C]  Allowable relative humidity range [%] Cooling method Max. operating altitude [m]		45-55/  30.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye Ye Ye Ye Ye Ye Ye Ye Or Transfor IP 640*1012*360 (With <147 (With 3 Ba Floor-st -25-60 (Derati -20-45 (s1 Month)/ Sturney Natural co 20	98.40 98.40 98.40 98.40 98.40  98.40	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection  Divervoltage category  Protective class Gird monitoring DC reverse polarity protection Battery input reverse polarity protection Insulation monitoring AC short-circuit protection Residual current protection  Residual current protection  AFCI  General Data  Fopology (PV/Battery) Degree of protection Dimensions (W*H*D) [mm]  Weight [kg] Mounting method Diperating ambient temperature range [°C]  Allowable relative humidity range [%] Cooling method Max. operating altitude [m] Display		45-55/  30.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye <p< td=""><td>98.40  98</td><td>/97.90</td></p<>	98.40  98	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Gurge protection  Divervoltage category  Protective class Gird monitoring  DC reverse polarity protection  Battery input reverse polarity protection  assulation monitoring  AC short-circuit protection  Residual current protection  DC switch (PV)  DOPET-heat protection  AFCI  General Data  Topology (PV/Battery)  Degree of protection  Dimensions (W*H*D) [mm]  Weight [kg]  Mounting method  Operating ambient temperature range [°C]  Storage temperature [°C]  Allowable relative humidity range [%]  Cooling method  Max. operating altitude [m]  Display  Communication		45-55/	98.40  98	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel*  Europe protection  Divervoltage category  Protective class  Eird monitoring  DC reverse polarity protection  Battery input reverse polarity protection  assulation monitoring  AC short-circuit protection  Residual current protection  DC switch (PV)  Diver-heat protection  AFCI  General Data  Fopology (PV/Battery) Degree of protection  Dimensions (W*H*D) [mm]  Weight [kg]  Mounting method  Deparating ambient temperature range [°C]  Extorage temperature [°C]  Allowable relative humidity range [%]  Cooling method  Max. operating altitude [m]  Display  Communication  DI/DO		45-55/  > 0.99/0.8.leadir 98.20/97.50 Master-sla Type II, D II DC an Cla Ye <td>98.40  98</td> <td>/97.90</td>	98.40  98	/97.90
Grid frequency range [Hz] Fotal harmonic distortion (THDi, rated power) [%] Fower factor at rated power/ Adjustable power factor  Effciency Max. effciency/European effciency [%]  Protection & Function  Parallel* Surge protection Devervoltage category  Protective class Gird monitoring DC reverse polarity protection Battery input reverse polarity protection Insulation monitoring AC short-circuit protection Residual current protection  Residual current protection  General Data  Fopology (PV/Battery) Degree of protection Dimensions (W*H*D) [mm]  Weight [kg] Mounting method Degrating ambient temperature range [°C] Storage temperature [°C] Allowable relative humidity range [%] Cooling method		45-55/	98.40  98	/97.90

<sup>\*</sup> Detail refer to inverters parallel configuration in User Manual



# Full Range From Power Generation, Transmission, Distribution To

# **Energy Storage**

## 32 years

With 32 years of experience, specialized in equipment manufacturing and engineering services

#### Public Co.

Founded in 1993 Stock listed in 2004 (SZSE002028)

### US\$3.2 Billion

2024 Turnover

#### 1400+

1411 Qualified engineers are the driving force behind the exceptional R&D progress

#### **TOP 3**

**Sieyuan**思源电气 Electrical Equip. Manufacturer

#### 22

22 Manufacturing bases

## **1**00+

With 10,000+ employees in 100+ countries and regions

# 1,000kV

Full range product: 10kV -1,000kV

# es Grid

Sieyuan Utility Scale BESS



**C&l and Residential BESS** 







#### <

#### **Swatten Europe Case**















#### <

#### **Swatten APAC Case**















### **Compatible Battery Brand**



Dyness Dyness





















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