





## Three-phase Hybrid Inverter Datasheet

HYT-5.0HV-AUG1 HYT-6.0HV-AUG1 HYT-8.0HV-AUG1 HYT-10.0HV-AUG1 HYT-12.0HV-AUG1

## **Description**

The HYT-HV Series is a high-performance three-phase hybrid inverter with excellent reliability, including power classes ranging from 5.0 kW to 12.0 kW.

The intelligent EMS function supports self-consumption mode, economical mode, and backup mode for multi-scenario applications.

Monitoring management through S-Miles Cloud allows users to remotely diagnose and track the individual system's performance over time, offering superior energy production.

## **Features**





## **Technical Specifications**

Charging strategy for Li-lon battery	Model	HYT-5.0HV-AUG1	HYT-6.0HV-AUG1	HYT-8.0HV-AUG1	HYT-10.0HV-AUG1	HYT-12.0HV-AU	
Stately of John Stately (1997)  Also, charge(discripting promet (V)				Li-ion			
Max. charge/discrarge quirrent (A)         20/20         30/30         30/30         30/30           Laboration of State (A)         5009/5000         6000/6000         8000/6000         10000/10000         10000/10000           Tringual crantery for Libon battery         6000/6000         7000         17000         15000           William Carrier (M)         7500         17000         17000         15000           All English of Carrier (M)         200         17000         15000         15000           All English of Carrier (M)         200         250         1500							
Max. charge places rigo   Power (Vi)   5000   5000   5000   6000   100000   10000   10000   100000   10000   100000   100000   100000   100000   100000   100000   1		20/20	20/20		30/30	30/30	
Changing districtly for Li-ion barriery   Self-adaption to IMS   Communication   CN	3 3 1,					10000/10000	
Communication   CAN   Purpose   Pu		3000/3000	0000/0000		10000/10000	10000/10000	
PV Input   PV Input   PV Input   PV   PV   PV   PV   PV   PV   PV   P				· ·			
Secommended max. PV power (W)   7500   5000   12000   15000				0.114			
Max. Input valtage (V) Start up valtage (V) Start u	•	7500	9000	12000	15000	15000	
States windspare (V)		7500	3000		15000	13000	
Start-up voltage (V)							
MPET voltage range (V) Max. short circuit current (A) Max. short s	9						
Max. Input current (A)							
Max. short circuit current (A) 17/17 17/17 17/17 17/17 17/14 17/3 17/3 17/3 17/3 17/3 17/3 17/3 17/3		14/14	1//1/		1//28	1//28	
MPFT number/Max. input. strings number   2/2   2/2   2/2   2/2   2/3							
AC Enjust and Output (On-grid)							
State of upput power (W)		212	2/2	2/2	213	2/3	
Max. output apparent power (VA)		5000	6000	8000	10000	12000	
25 port output power (W)   5000   6000   8000   10000   1200	1 1 1 1						
Max. Imput power (W)							
SILVIVE   SILV							
Sale-40		10000	12000		10000	10000	
Saked grif frequency (Hz)							
Asked output current (A)							
Max. output current (A)  15.2  18.2  18.2  24.2		7.0	0.7		4.4.5	47.4	
Max. Input current (A)							
Power factor							
ITHDI (@related output)		15.2				24.2	
AC Output (Off-grid)  Active (W) 5000 6000 8000 10000 1200  Max. output apparent power (W) 5000 6000 8000 10000 1200  Max. output apparent power (W) 5000 6000 8000 10000 1200  Back-up switch time (ms)			>0		ng)		
Rated output power (W)	(6 1111 1141)			<3%			
Max. output apparent power (VA) 10000, 10s 12000, 10s 16000, 10s							
REPS port output power (W)	Rated output power (W)					12000	
Seach up switch time (ms)	Max. output apparent power (VA)				•	16000, 10s	
Grid form Rated output voltage (V) Rated output frequency (Hz) Rated output frequency	EPS port output power (W)	5000	6000	8000	10000	12000	
Rated output voltage (V) Rated output frequency (Hz)  Max. continuous output current (A)  8.3  10.0  13.3  16.7  17.4  17.4  17.4  17.6  17.6  17.6  17.7  17.6  17.7	Back-up switch time (ms)			<10			
Max. continuous output current (A)   8.3   10.0   13.3   16.7   17.4	Grid form			3L/N/PE			
Max. continuous output current (A)  8.3  10.0  13.3  16.7  17.4  Thibv (@linear load)  ### Fifficiency  ### Fifficiency ### Fifficiency  ### Fifficiency  ### Fifficiency  ### Fifficiency  ### Fifficiency  ### Fifficiency  ### Fifficiency  ### Fifficiency  ### Fifficiency  ### Fifficiency  ### Fifficiency  ### Fifficiency ### Fifficiency  ### Fifficiency ### Fifficiency ### Fifficiency ### Fifficiency ### Fifficiency ### Fifficiency ### Fiffici	Rated output voltage (V)			380/400			
### Difficiency   99.9%   99.	Rated output frequency (Hz)			50/60			
### Efficiency	Max. continuous output current (A)	8.3	10.0	13.3	16.7	17.4	
MPPT efficiency 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 99.9% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 97.4% 97.5% 9				<3%			
Max. efficiency 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 98.0% 97.5% 9	Efficiency						
EU efficiency 97.0% 97.1% 97.2% 97.4% 97.5	MPPT efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	
Max. battery discharge to AC efficiency 97.5% 9	Max. efficiency	98.0%	98.0%	98.0%	98.0%	98.0%	
Protection Anti-Islanding protection Anti-Islanding protection Integrated Pry string input reverse polarity protection Insulation resistor detection Insulation resistor detection Integrated Residual current monitoring unit AC over current protection Integrated AC short current protection Integrated AC short current protection Integrated AC exervoltage and undervoltage protection DC Type III/AC Type III General  Dimensions (W × H × D [mm]) S02 × 486 × 202 Weight (kg) 26.5 Mounting Operating temperature (°C) -25 to +65 (×45, derating) Relative humidity O-95%, no condensing Cooling Natural convection Topology (Solar/Battery) Transformerless/Transformerless Altitude (m) ≥2000 Protection degree IP65 Protection class Class I Noise (dB)  Service Screen SMM, 1 × DI, 2 × DO Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-Islanding method Country of Manufacture Certifications and Standards	EU efficiency	97.0%	97.1%	97.2%	97.4%	97.5%	
Anti-islanding protection  PV string input reverse polarity protection Insulation resistor detection Residual current monitoring unit AC over current protection Integrated CO over current protection Integrated Integrated  CO over current protection Integrated Integrate	Max. battery discharge to AC efficiency	97.5%	97.5%	97.5%	97.5%	97.5%	
PV string input reverse polarity protection Insulation resistor detection Insulation resistor detection Integrated AC over current monitoring unit Integrated AC over current protection Integrated AC short current protection Integrated AC short current protection Integrated AC overvoltage and undervoltage protection Surge protection DC Type II/AC Type III  General  Dimensions (W × H × D [mm]) Soz × 486 × 202 Weight (kg) Wall mounting Operating temperature (°C) Post, derating) Relative humidity Opsymments Cooling Natural convection Topology (Solar/Battery) Transformerless/Transformerless Altitude (m) Soz version Protection degree Protection degree IP65 Protection dass Class I Noise (dB) LED, App Digital input/output DRM, 1 × DI, 2 × DO Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method Country of Manufacture Certifications and Standards	Protection		-				
Insulation resistor detection Residual current monitoring unit Residual current monitoring unit AC cover current protection Integrated AC short current protection Integrated AC overvoltage and undervoltage protection Surge protection General  Dimensions (W × H × D [mm]) Sou × 486 × 202 Weight (kg) Wall mounting Operating temperature (°C) Relative humidity Operating temperature (°C) Relative humidity Operating temperature (°C) Relative humidity Transformerless/Transformerless Altitude (m) Transformerless/Transformerless Altitude (m) Protection degree Protection degree Protection degree Protection degree Digital input/output DRM, 1 × DI, 2 × DO Communication RS485, optional: Wi-Fitchernet/4G <sup>(1)</sup> Active anti-islanding method Country of Manufacture Certifications and Standards	Anti-islanding protection			Integrated			
Residual current monitoring unit AC over current protection AC over current protection AC overvoltage and undervoltage protection AC overvoltage and undervoltage protection Surge protection BC Type III/AC Type III General  Dimensions (W × H × D [mm]) S02 × 486 × 202 Weight (kg) 26.5 Mounting Wall mounting Operating temperature (°C) -25 to +65 (>45, derating) Relative humidity Operating temperature (°C) Transformerless/Transformerless Altitude (m) Transformerless/Transformerless Altitude (m) S2000 Protection degree IP65 Protection class Class I Noise (dB) User interface LED, App Digital input/output DRM, 1 × DI, 2 × DO Communication Active anti-islanding method Country of Manufacture Certifications and Standards  Certifications and Standards	PV string input reverse polarity protection		<u> </u>				
Residual current monitoring unit AC over current protection AC over current protection AC overvoltage and undervoltage protection AC overvoltage and undervoltage protection Surge protection BC Type III/AC Type III General  Dimensions (W × H × D [mm]) S02 × 486 × 202 Weight (kg) 26.5 Mounting Wall mounting Operating temperature (°C) -25 to +65 (×45, derating) Relative humidity Operating temperature (°C) Transformerless/Transformerless Altitude (m) Transformerless/Transformerless Altitude (m) S2000 Protection degree IP65 Protection degree IP65 Protection class Class I Noise (dB) User interface LED, App Digital input/output DRM, 1 × DI, 2 × DO Communication Active anti-islanding method Country of Manufacture Certifications and Standards	Insulation resistor detection		<u> </u>				
AC over current protection AC short current protection AC short current protection AC short current protection AC overvoltage and undervoltage protection  Surge protection DC Type II/AC Type III  General  Dimensions (W × H × D [mm]) 502 × 486 × 202  Weight (kg) Weight (kg) Wall mounting Operating temperature (°C) Relative humidity O-95%, no condensing Cooling Natural convection Topology (Solar/Battery) Transformerless/Transformerless Altitude (m) Sugono Protection degree IP65 Protection class Class I Noise (dB) Suser interface LED, App Digital input/output DRM, 1 × DI, 2 × DO Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method Country of Manufacture Certifications and Standards							
AC short current protection AC overvoltage and undervoltage protection Surge protection DC Type II/AC Type III General  Dimensions (W × H × D [mm]) Dimensions (W × H × D [mm]) Soz × 486 × 202 Weight (kg) Soz × 486 × 202 Weight (kg) Wall mounting Operating temperature (°C) Operating temperature (°C) Soz × 486 × 202 Weight (kg) Soz × 486 × 202 Soz × 486	2						
AC overvoltage and undervoltage protection  Surge protection  General  Dimensions (W × H × D [mm])  Weight (kg)  Departing temperature (°C)  Relative humidity  Cooling  Transformerless/Transformerless  Altitude (m)  Protection degree  Protection degree  Protection class  Noise (dB)  User interface  Degration with a bit in the protection  Elb, App  Digital input/output  Communication  Active anti-islanding method  Country of Manufacture  Certifications and Standards			9				
Surge protection DC Type II/AC Type III  General  Dimensions (W × H × D [mm])  Weight (kg)  Operating temperature (°C)  Relative humidity  Cooling  Cooling  Natural convection  Transformerless/Transformerless  Altitude (m)  Protection degree  IP65  Protection class  Class I  Noise (dB)  User interface  DC Type II/AC Type III  SO2 × 486 × 202  Wall mounting  0-25. to +65 (> 45, derating)  Natural convection  Transformerless/Transformerless  Class I  Noise (dB)  V40  User interface  LED, App  Digital input/output  Communication  RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method  Country of Manufacture  Certifications and Standards		<u> </u>					
General         Dimensions (W × H × D [mm])       502 × 486 × 202         Weight (kg)       26.5         Mounting       Wall mounting         Operating temperature (°C)       -25 to +65 (×45, derating)         Relative humidity       0-95%, no condensing         Cooling       Natural convection         Topology (Solar/Battery)       Transformerless/Transformerless         Altitude (m)       ≤2000         Protection degree       IP65         Protection class       Class I         Noise (dB)       <40		<u> </u>					
Dimensions (W × H × D [mm])  Weight (kg)  Weight (kg)  Derating temperature (°C)  Relative humidity  Cooling  Natural convection  Topology (Solar/Battery)  Protection degree  Protection class  Noise (dB)  User interface  Digital input/output  Communication  Active anti-islanding method  Country of Manufacture  Certifications and Standards  Wall mounting  Wall mounting  Vall mounting  Follow (Wa H × D [mm])  Follow (26.5)  Wall mounting  Wall mounting  Follow (Wa H × D [mm])  Natural convection)  Post%, no condensing  Natural convection  Transformerless/Transformerless  2000  Protection degree  IP65  Class I <a href="#page-12">Protection degree</a> Protection class  Class I <a href="#page-12">Class I</a> Value  Communication  RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method  Country of Manufacture  China  Certifications and Standards	_ <del></del>			De Type III/Te Type III			
Weight (kg)  Mounting  Operating temperature (°C)  Relative humidity  Cooling  Cooling  Natural convection  Transformerless/Transformerless  Altitude (m)  Protection degree  Protection class  Noise (dB)  User interface  LED, App  Digital input/output  Communication  Active anti-islanding method  Country of Manufacture  Certifications and Standards  Wall mounting  Wall mounting  Wall mounting  Active a +25 to +65 (>45, derating)  Active a +25 to +65 (>45, derating)  Active anti-islanding method  Certifications and Standards				502 × 486 × 202			
Mounting       Wall mounting         Operating temperature (°C)       -25 to +65 (>45, derating)         Relative humidity       0-95%, no condensing         Cooling       Natural convection         Topology (Solar/Battery)       Transformerless/Transformerless         Altitude (m)       ≤2000         Protection degree       IP65         Protection class       Class I         Noise (dB)       <40							
Operating temperature (°C)       -25 to +65 (>45, derating)         Relative humidity       0-95%, no condensing         Cooling       Natural convection         Topology (Solar/Battery)       Transformerless/Transformerless         Altitude (m)       ≤2000         Protection degree       IP65         Protection class       Class I         Noise (dB)       <40	3 . 3.						
Relative humidity Cooling Natural convection Topology (Solar/Battery) Transformerless/Transformerless Altitude (m) Protection degree Protection class Class I Noise (dB) User interface LED, App Digital input/output DRM, 1 × DI, 2 × DO Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method Country of Manufacture Certifications and Standards							
Cooling     Natural convection       Topology (Solar/Battery)     Transformerless/Transformerless       Altitude (m)     ≤2000       Protection degree     IP65       Protection class     Class I       Noise (dB)     <40		· , 3,					
Topology (Solar/Battery)  Altitude (m)  Protection degree  Protection class  Noise (dB)  User interface  Digital input/output  Communication  Active anti-islanding method  Country of Manufacture  Certifications and Standards  Transformerless/Transformerless  ∠2000  IP65  Class I  Class I  ∠40  LED, App  DRM, 1 × DI, 2 × DO  RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> AFDPF + AQDPF <sup>(2)</sup> China	,						
Altitude (m) ≤2000 Protection degree IP65 Protection class Class I Noise (dB) < 40 User interface LED, App Digital input/output DRM, 1 × DI, 2 × DO Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method AFDPF + AQDPF <sup>(2)</sup> Country of Manufacture China Certifications and Standards	2		_				
Protection degree IP65 Protection class Class I Noise (dB) <40 User interface LED, App Digital input/output DRM, 1 × DI, 2 × DO Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method AFDPF + AQDPF <sup>(2)</sup> Country of Manufacture China Certifications and Standards			Tra		ess		
Protection class Class I Noise (dB) <40 User interface LED, App Digital input/output DRM, 1 × DI, 2 × DO Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method AFDPF + AQDPF <sup>(2)</sup> Country of Manufacture China Certifications and Standards							
Noise (dB)  User interface  UED, App  Digital input/output  DRM, 1 × DI, 2 × DO  RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method  Country of Manufacture  Certifications and Standards	_						
User interface LED, App Digital input/output DRM, 1 × DI, 2 × DO  Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method AFDPF + AQDPF <sup>(2)</sup> Country of Manufacture China  Certifications and Standards							
Digital input/output DRM, 1 × DI, 2 × DO  Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method AFDPF + AQDPF <sup>(2)</sup> Country of Manufacture China  Certifications and Standards				<40			
Communication RS485, optional: Wi-Fi/Ethernet/4G <sup>(1)</sup> Active anti-islanding method AFDPF + AQDPF <sup>(2)</sup> Country of Manufacture China  Certifications and Standards				LED, App			
Active anti-islanding method  Country of Manufacture  Certifications and Standards  AFDPF + AQDPF <sup>(2)</sup> China	Digital input/output			DRM, $1 \times DI$ , $2 \times DO$			
Country of Manufacture China Certifications and Standards	Communication		RS48	35, optional: Wi-Fi/Ethernet	/4G <sup>(1)</sup>		
Country of Manufacture China Certifications and Standards							
Certifications and Standards	5			·			
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2.1.2 21 212 data			FN 505.	49. VDF-AR-N 4105 AS/N79	5 4777.2		
Safety/EMC standard IEC 62109-1/-2, EN 61000-6-1/-3							