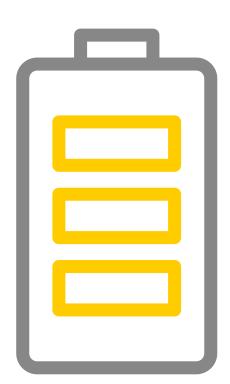
# RESIDENTIAL STORAGE SYSTEMS



RESIDENTIAL EMOBILITY MOUNTING



#### -A-X-ITEC

Storage inverter type		AXIhycon 5 / 6 / 8 / 10 H	AXIhycon 12 / 15 / 20 H	AXIhycon 29.9 / 40 / 50 H		
Max. PV system size (kWp)		DC: 8.0 to 16.0 AC: without restriction				
0.C = h====	1		0			
AC phases	3		•			
Surge Protect DC / AC	tion Device		Type 2 / -			
Bat	AC (BatInv)		•			
coupling	DC (Hybrid)		•			
Bat. charging PV inverter (A			•			
Manufacture	r storage		-A-XITEC			
Storage type		AXIstorage Li SV1 10.1 to 2	3.6 A	XIstorage Li SV3 9.7 to 34		
Number of sto (tower) / Max (towers) para		3-7/6 2to7/-				
Max. charging tem	g power Sys-	to be calculated depending on the set / table				
Usable capac per unit	ity (kWh)	10,1 to 23,6 9.7 to 34.0				
Time window from commis	for expansion sioning		Up to 5 years			
Emergency po (separate AC			backup connection			
Battery backu (backup conn i.n. transfer sv	ection inverter,		backup connection			
Full battery b (automatic tra	ackup ansfer switch)					
Active PV-mo backup mode		•				
Interfaces (Heat pump +	Connection FRE and heat pump via DRM interfaces  Connection FRE and heat pump via DRM interfaces					
SMART Charg Dynamic elect fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-	Fixed charging times; dynamic electricity tariffs (FW update coming soon); Limitation by EVU (currently via ext.EMS, soon integrated DRM contact)				
System infor	3-phase DC coupled storage system;Power classes up to 10kW with 2 MPPT - 12 / 15 / 20 / 40 / 50 kW with 4 MkW with 3 MPPT; UPS functionality (<10ms); integrated arc detection; peak shaving; up to 3 devices in parallel of same inverter performance classes andNd battery sizes, EPS outputs not synchronized); use of hybrid as offgree (with / without generator) possible; control for external NA protection possible					

<sup>\*</sup> In Germany limited to 4.6 kW in single-phase operation (VDE-AR-N 4105) // \*\*With suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability /Release according to manufacturer's and the suitable PV inverter // \*\*\*Availability // \*\*\*Availabilityspecification // All information without guarantee and subject to reservation according to manufacturer's approval.



Storage inverter type		Enphase Microinverter					
Max. PV syste	em size (kWp)	AC: without restriction					
AC phases	1	•					
ric phases	3	•					
Surge Protect DC / AC	ion Device	- / -					
Bat	AC (BatInv)	•					
coupling	DC (Hybrid)	$\circ$					
Bat. charging PV inverter (A	via separate C-coupling)	•					
Manufacture	-storage	<b>⊕</b> ENPHASE.					
Storage type		Enphase Energy AC Storage System 5P-3P Flex Phase					
Number of storages per unit (tower) / Max. Units (towers) parallel		1 / unlimited					
Max. charging power Sys- tem		to be calculated depending on the set / table					
Usable capaci per unit	ity (kWh)	5					
Time window from commiss	for expansion sioning	Unlimited					
Emergency po (separate AC o		0					
Battery backu (backup conne i.n. transfer sv	ection inverter,	0					
Full battery b (automatic tra	ackup ansfer switch)	(IQ7 series) Announced (IQ8 series)					
Active PV-mo backup mode	dules in	(IQ7 series) Announced (IQ8 series)					
Interfaces (Heat pump +	FRE)	Connection FRE via Envoy-S Gateway					
SMART Charg Dynamic elect fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-	Fixed charging times; dynamic electricity tariffs; Limitation by EVU (via contact at the gateway)					
System information		Module inverter with 1/3-phase AC coupled storage system					



Storage inver	rter type	PRIMO GEN24 / PRIMO GEN24 Plus 3.0 / 3.6 / 4.0 / 4.6 / 5.0 (not DE) / 6.0 (not DE) / 8.0 (not DE) / 10.0 (not DE)					
Max. PV syste	em size (kWp)		DC: 4.5 to 15.0 AC: without restriction				
	1		•				
AC phases	3		0				
Surge Protect DC / AC	tion Device		Type 1+2 opt. /-				
Bat	AC (BatInv)		•				
coupling	DC (Hybrid)		•				
Bat. charging PV inverter (A	via separate AC-coupling)		•				
Manufacture	r storage	B	פי	(Franius			
Storage type		B-Box HVS 5.1 to 7.7	B-Box HVM 11 to 19.3	Reserva 6.3 / 9.5			
Number of st (tower) / Max (towers) para		2 - 3 / up to 3	4 - 8 / up to 3	2 - 3 / up to 4			
Max. chargin tem	g power Sys-	to be calculated deper	to be calculated depending on the set / table				
Usable capac per unit	ity (kWh)	5,1 to 7,7	11,0 to 19,3	6,3 to 9,5			
Time window from commis	for expansion sioning	Unlimited	Unlimited	Up to 2 years			
Emergency po (separate AC			, 1-phase at PV-Point				
Battery back (backup conn i.n. transfer s	ection inverter,		0				
Full battery b	oackup ansfer switch)	•	, backup box must be assembled by yours	self			
Active PV-mo			•				
Interfaces (Heat pump +	FRE)	Connection Heat pumpMpe and FRE via 6 x DI / DO contact					
Dynamic electric fixed chargin	ging Features etricity tariffs, g times, Limi- J according to	Fixed charging times; dynamic electricity tariffs (via Smart Meter IP + FW Update); Limitation by EVU (integr.Interface)					
System infor	mation	as usual, with an active battery connection battery connection;This can be activated to	1-phaSiges hybrid device with additional PV inverter via AC coupling Version GEN24 Plus: the GEN24 Plus series is delivered, as usual, with an active battery connection as a hybrid; Version GEN24: the new GEN24 series is delivered with deactivated battery connection; This can be activated with an additional activation code At power classes 5.0 to 10.0 kW by selecting VDE-AR-N 4105 no limit to 4.6 kVA, therefore not usable in DE				

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Storage inve	rter type	SYMO GEN24 / SYMO GEN24 Plus 3.0/4.0/5.0	SYMO GEN24 / SYMO GEN24 Plus 6.0 / 8.0 / 10.0	SYMO GEN24 12.0 SC / SC Plus		
Max. PV system size (kWp)			DC: 4.5 to 18.0 AC: without restriction			
	1		$\circ$			
AC phases	3		•			
Surge Protec DC / AC	tion Device		Type 1 + 2 opt. /-			
Bat	AC (BatInv)		•			
coupling	DC (Hybrid)		•			
Bat. charging PV inverter ( <i>l</i>	g via separate AC-coupling)		•			
Manufacture	er storage	B	YD	Fronius		
Storage type		B-Box HVS 5.1 to 12.8	B-Box HVM 11.0 to 22.1	Reserva 6.3 / 9.5 / 12.6 / 15.8		
Number of storages per unit (tower) / Max. Units (towers) parallel		2 - 5 / up to 3 up to 3 (19.3), 2 (22.1)		2 - 5 / up to 4		
Max. charging power Sys- tem		to be calculated depe	to be calculated depending on the set / table			
Usable capad per unit	city (kWh)	5,1 to 12,8	11,0 to 22,1	6,3 to 15,8		
Time window from commis	ofor expansion ssioning	Unli	imited	Up to 2 years		
Emergency p (separate AC			1-phase at PV-Point			
Battery back (backup conn i.n. transfer s	ection inverter,		0			
Full battery t (automatic tr	oackup ansfer switch)	0	, with Enwitec Backup Box /	/ Fronius BAckup Switch + Controller		
Active PV-mo			•			
Interfaces (Heat pump +	- FRE)	Connection Heat pumpMpe and FRE via 6 x DI / DO contact				
Dynamic electric fixed charging	ging Features ctricity tariffs, ig times, Limi- J according to	Fixed charging times; dynamic electricity tariffs (via Smart Meter IP + FW Update); Limitation by EVU (integr.Interface)				
System infor	mation	3-phase hybrid device with high charging performance and zAdditional PV inverter via AC coupling; control for external NA protection possible; Version GEN24 (SC) Plus: the GEN24 Plus series is delivered, as usual, with an active battery connectio as a hybrid; Version GEN24 (SC): the new GEN24 series wird delivered with deactivated battery connection; this can be activated with additional activation code				



Storage invert								
Storage inverter type		<b>Verto Plus</b> 15.0 / 17.5 / 20.0 / 25.0 / 30.0 / 33.0						
Max. PV system	m size (kWp)	DC: 22,5 to 50,0 AC: without restriction						
AC phases	1		C	)				
AC pilases	3							
Surge Protecti DC / AC	on Device		Type 1+2	/ Type 2				
bat	AC (BatInv)							
coupling	DC (Hybrid)							
Bat. charging v PV inverter (AC								
Manufacturer	storage		BYD		Fronius			
Storage type		B-Box HVS 5.1 to 12.8 (Release announced)	B-Box HVM 11.0 to 22.1 (Release announced)	B-Box HVB 5.9 to 29.6	Reserva 6.3 / 9.5 / 12.6 / 15.8			
Number of sto (tower) / Max. (towers) paral	Units	2 - 5 / to 3	4 - 8 / To 3 (19.3), 2 (22.1)	2 - 10 / 3	2 - 5 / up to 4			
Max. charging tem	power Sys-	to be c	alculated depending on the set /	′ table	to be calculated depending on the set / table			
Usable capacit per unit	ty (kWh)	5,1 to 12,8	11,0 to 22,1	5.94 to 29.69	6,3 to 15,8			
Time window f			Unlimited		Up to 2 years			
Emergency por (separate AC cl			C	)				
Battery backup (backup conne i.n. transfer sw	ction inverter,		C	)				
Full battery ba (automatic tra			, with Fronius Backu	ıp Switch + Controller				
Active PV-mode	Jules in		, with Fronius Backu	ıp Switch + Controller				
Interfaces (Heat pump + f	FRE)	Connection Heat pumpMpe and FRE via 6 x DI / DO contact						
SMART Chargi Dynamic elect fixed charging tation by EVU a EnWG §14a	ricity tariffs, times, Limi-	Fixed charging times; dynamic electricity tariffs (via Smart Meter IP + FW Update); Limitation by EVU (integr.Interface)						
System inform	nation	3-phase DC-coupled hybrid uni possible;	t with additional PV inverter via A	AC coupling; 3 MPPT; control fo	r external NA protection			

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Please note the instructions at the end of the document.

# GOODWE

Storage inverter type		GW-EH plus + Hybrid 3600 - 6000*					
Max. PV syste	em size (kWp)	DC: 4,8 to 8,0 (only EH / EH plus +) AC: without restriction					
0.C = h====	1						
AC phases	3		(				
Surge Protect DC / AC	tion Device		-,	/-			
Bat	AC (BatInv)						
coupling	DC (Hybrid)						
Bat. charging PV inverter (A							
Manufacture	r storage	(B <sup>t</sup> r	סי	PYLO	NTECH		
Storage type		B-Box HVS 5.1 to 12.8	B-Box HVM 11 to 22.1	Force-H1 10.1 to 23.6	Force-H2 6.7 to 16.9		
Number of sto (tower) / Max (towers) para		2 - 5 / up to 3	4 - 8 / up to 3	3-7/6	2 - 5 / 6		
Max. charging tem	g power Sys-	to be calculated depending on the set / table		to be calculated depending on the set / table			
Usable capac per unit	ity (kWh)	5,1 to 12,8	11,0 to 22,1	10,1 to 23,6	6,7 to 16,9		
Time window from commis	for expansion sioning	Unlim	iited	Up to 2	years		
Emergency po (separate AC o			, backup	connection			
Battery backu (backup conno i.n. transfer sv	ection inverter,		, backup connection	with UPS functionality			
Full battery b (automatic tra	ackup ansfer switch)		(				
Active PV-mo backup mode			(only EH	/ EH plus +)			
Interfaces (Heat pump +	FRE)						
SMART Charg Dynamic elec fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-	Fixed charging times; dynamic electricity tariffs (via Goodwe HEMS) Limitation by EVU (integrated interface)					
System inform	nation	1-phase DC-coupled hybrid devi inverter	ice with additional PV inverter v	ria AC coupling; BH series only via	AC coupling to suitable PV		

# GOODHE

Storage inverter type		GW-EH plus + Hybrid 3600 - 6000*						
Max. PV syste	em size (kWp)	DC: 4,8 to 8,0 (only EH / EH plus +) AC: without restriction						
AC phases	1			•				
Ac phases	3		(	$\circ$				
Surge Protect DC / AC	tion Device		-	/-				
Bat	AC (BatInv)			•				
coupling	DC (Hybrid)			•				
Bat. charging PV inverter (A			(	•				
Manufacture	r storage	- <b>^</b> -X-X-l	HEC	GOC	DME			
Storage type		AXIstorage Li SV1 10.1 to 23.6	AXIstorage Li SV2 6.7 to 16.9	Lynx Home F Plus + LX F6.6 to 13.1-H	Lynx D 5.0 to 40.0			
Number of sto (tower) / Max (towers) para		3-7/6	2-5/6	2 - 4 / bis 8	1-8/-			
Max. charging tem	g power Sys-	to be calculated deper	nding on the set / table	to be calculated deper	nding on the set / table			
Usable capac per unit	ity (kWh)	10,1 to 23,6	6,7 to 16,9	6,55 to 13,1	5,0 to 40,0			
Time window from commiss	for expansion sioning	Up to 5	i years	Up to 2 years	Unlimited			
Emergency po (separate AC o			, backup	o connection				
Battery backu (backup conno i.n. transfer sv	ection inverter,		, backup connection	n with UPS functionality				
Full battery b (automatic tra	ackup ansfer switch)		(	$\circ$				
Active PV-mo backup mode			(only EF	H / EH plus +)				
Interfaces (Heat pump +	FRE)							
SMART Charg Dynamic elec fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-	Fixed charging times; dynamic electricity tariffs (via Goodwe HEMS) Limitation by EVU (integrated interface)						
System inform	nation	1-phase DC-coupled hybrid dev	vice with additional PV inverter	via AC coupling; BH series only v	ia AC coupling to suitable PV			

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# GOODWE

Storage inver	ter type	GW ET plus + Hybrid 5KN / 6.5KN / 8KN / 10KN (16A) GW ET-20 G2 Hybrid 6000 / 8000 / 10K / 12K / 15K							
Max. PV syste	em size (kWp)	DC: 6,5 to 13,0 AC: without restriction							
	1				$\bigcirc$				
AC phases	3				•				
Surge Protect DC / AC	ion Device				Type 2 / Type 2				
Bat	AC (BatInv)				•				
coupling	DC (Hybrid)				•				
Bat. charging PV inverter (A					•				
Manufacture	storage	Br	<b>ל</b> ם	<b>₩</b> PYL	ONTECH		-AXITEC		
Storage type		B-Box HVS /+ 5.1 to 12.8 (+ only ET-20 G2)	B-Box HVM /+ 11 to 22.1 (+ only ET-20 G2)	Force-H1 13.5 to 23.6	Force-H2 6.7 to 16.9			AXIstorage Li SV3 9.7 to 24.3	
Number of sto (tower) / Max (towers) para		2 - 5 / up to 3	4 - 8 / up to 3	4-7/6	2-5/6	4-7/6	2-5/6	2 to 5 / -	
Max. charging tem	g power Sys-		d depending on / table		ed depending on t / table	to be calcula	ted depending on	the set / table	
Usable capaci per unit	ity (kWh)	5,1 to 12,8	11,0 to 22,1	13,5 to 23,6	6,7 to 16,9	13,5 to 23,6	6,7 to 16,9	9.7 to 24.3	
Time window from commiss	for expansion sioning	Unlimited	Unlimited	Up to 2	2 years		Up to 5 years		
Emergency po (separate AC o					, backup connect	ion			
Battery backu (backup conne i.n. transfer sv	ection inverter,				, backup connect	ion			
Full battery b (automatic tra	ackup ansfer switch)				$\bigcirc$				
Active PV-mo backup mode	dules in				(only ET plus +	)			
Interfaces (Heat pump +	FRE)	C	Connection of heat pump via potential-free contact; Connection FRE via connection terminals						
SMART Charg Dynamic elect fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-	Fixed charging times; dynamic electricity tariffs (announced - via Goodwe HEMS)Limitation by EVU (integrated interface)							
System inforr	nation			•		ion (hybrid only) (S ng to suitable PV in	-	uired, DE+A: all	

# GOODHE

Storage inverter type		GW ET plus + Hybrid 5K / 6.5K / 8K / 10K GW ET plus + Hybrid 5KN / 6.5KN / 8KN / 10KN (16A)					
Max. PV syste	em size (kWp)		DC: 6,5 to 13,0 AC: without restriction				
	1		0				
AC phases	3		•				
Surge Protect DC / AC	tion Device		Type 2 / Type 2				
Bat	AC (BatInv)		•				
coupling	DC (Hybrid)		•				
Bat. charging PV inverter (A			•				
Manufacture	r storage	GOC	DME	ZYC. ENERGY			
Storage type		Lynx Home F Plus + LX F6.6 to 16.4-H	Lynx D 5.0 to 40.0	SIMPO HV 6.4 to 28.8			
Number of sto (tower) / Max (towers) para		2 - 5 / up to 8	1-8/-	2 - 9 / up to 8			
Max. charging tem	g power Sys-	to be calculated deper	nding on the set / table	to be calculated depending on the set / table			
Usable capac per unit	ity (kWh)	6,55 to 16,38	5,0 to 40,0	6,4 to 28,8			
Time window from commis	for expansion sioning	Up to 2 years	Unlimited	Unlimited			
Emergency po (separate AC o			,backup connection				
Battery backu (backup conne i.n. transfer sv	ection inverter,		, backup connection				
Full battery b (automatic tra	ackup ansfer switch)		$\circ$				
Active PV-mo backup mode			(only ET plus +)				
Interfaces (Heat pump +	FRE)	Connection of heat pump via potential-free contact; Connection FRE via connection terminals					
	tricity tariffs, g times, Limi-	Fixed charging times; dynamic electricity tariffs (announced - via Goodwe HEMS)Limitation by EVU (integrated interface)					
System inform	mation	3-phase DC coupled storage system; Up t EPS outputs active - not synchronized) **					

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# GOODWE

Storage inver	ter type	GW ET Hybrid 15K / 20K / 25K / 29.9K						
Max. PV syste	em size (kWp)	DC: 22.5 to 44.85 AC: not possible ***						
AC abases	1			(	)			
AC phases	3							
Surge Protect DC / AC	tion Device			Туре	22/-			
Bat	AC (BatInv)							
coupling	DC (Hybrid)							
Bat. charging PV inverter (A								
Manufacture	r storage	(B'	70	ZYC		GOODWE		
Storage type		B-Box HVS 5.1 to 12.8	B-Box HVM 11.0 to 22.1	SIMPO HV 6.4 to 28.8	Lynx Home F Plus + LX F6.6 to 16.4-H	Lynx D 5.0 to 40.0	Lynx C 60K	
Number of sto (tower) / Max (towers) para		2 - 5 / -	4-8/-	2 - 9 / up to 8	2 - 5 / up to 8	1-8/-	1/3	
Max. charging tem	g power Sys-		epending on the set able	depending on the set / table	to be calcu	lated depending on th	ne set / table	
Usable capaci per unit	ity (kWh)	5,1 to 12,8	11,0 to 22,1	6,4 to 28,8	6,55 to 16,38	5,0 to 40,0	each 60,0	
Time window from commiss	for expansion sioning	Unlii	mited	Unlimited	Up to 2 years	Unlimited	-	
Emergency po (separate AC o				,backup	connection			
Battery backu (backup conne i.n. transfer sv	ection inverter,			, backup connection	n with UPS functional	ity		
Full battery b (automatic tra	ackup ansfer switch)			(	$\supset$			
Active PV-mo backup mode								
Interfaces (Heat pump +	FRE)	Connection heat pump via SG-Ready contact; Connection FRE via DRM connection						
SMART Charg Dynamic elec- fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-	Fixed charging times;Dynamic electricity tariffs (announced - via Goodwe HEMS)						
System inform	nation	Peak-Shaving; Versi	on 15K + 20K with 2 M	old cascade; no logge IPPT and 1 x battery;2 rging currents with u	5K + 29.9K with 3 MP	PT and 2 x battery co	nnection; High DC	



Storage inver	ter type	SUN2000-2 / / 4.6 / 5* /		SUN2000- 3 / 10 KT SUN2000 5 / 6 / 8		SUN2000-12 / 15	/ 17 / 20 / 25K-MB0	
Max. PV system size (kWp)		DC: 3,0 to 9,0 AC: without restriction			to 22,0 t restriction		,0 to 37,5 ut restriction	
	1					I		
AC phases	3	С	)				•	
Surge Protect	tion Device	Type 2 / `	Туре 2	Type 2 /	/ Type 2	Type 2	/ Type 2	
Bat	AC (BatInv)	•	)			(	•	
coupling	DC (Hybrid)	•	)			(	•	
Bat. charging PV inverter (A		•	)			(	•	
Manufacture	r storage	<b>₩</b> н∪	AWEI	<b>%</b> HI	UAWEI	<b>\$</b> \$ H	IUAWEI	
Storage type		LUNA2000-5 / 10 / 15-S0	LUNA2000-7 / -14 / -21-S1	LUNA2000-5 / 10 / 15-S0	LUNA2000-7 / -14 / -21-S1	LUNA2000-5 / 10 / 15-S0	LUNA2000-7 / -14 / -21-S1	
Number of sto (tower) / Max (towers) para		1 - 3 / up to 2	1 - 3 / up to 2	1 - 3 / up to 2	1 - 3 / up to 2	1 - 3 / 2 per Input	1-3/2 per Input	
Max. charging tem	g power Sys-	to be calculated de set / ta			to be calculated depending on the set / table		to be calculated depending on the set / table	
Usable capac per unit	ity (kWh)	5,0 to 15,0	7,0 to 21,0	5,0 to 15,0	7,0 to 21,0	5,0 to 15,0	7,0 to 21,0	
Time window from commiss	for expansion sioning	Unlim	ited	Unlimited		Unlimited		
Emergency po (separate AC o		, 1-phase with Box-	Huawei Backup B0		ox-B1 (1-ph)MAP0 with 63A-T0 (3-ph)	, With Smart Guard-63A-T0 (1-ph)		
Battery backu (backup conno i.n. transfer sv	ection inverter,	, 1-phase with Box-			ox-B1 (1-ph)MAP0 with 63A-T0 (3-ph)	, With Smart Guard-63A-T0 (1-ph)		
Full battery b	ackup ansfer switch)	С	)		Smart Guard-63A-T0 ph)	, With Smart G	uard-63A-T0 (1-ph)	
Active PV-mo backup mode		•	)			(	•	
Interfaces (Heat pump +	FRE)	Connection heat pur	np (withEMMA) + F	RE via Huawei Smart Lo	gger			
SMART Charg Dynamic elec fixed charging tation by EVU EnWG §14a	ing Features tricity tariffs, g times, Limi-	Fixed charging times; dynamic electricity tariffs (with EMMA); Limitation by EVU						
System inform	mation	1-phase hybrid devic PV inverter via AC co use of the Huawei O <sub>l</sub> use as off-grid syste connection possible	upling; optional ptimizer possible; em without mains	Up to 3 devices in parallel operation ***; PV inverter via A Replacement power operation M1 series only use of the Huaw			vice withAdditional coupling; optional Optimizer possible; v connections; arc	

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# KACO new energy.

Storage inverter type		Hybrid NH3 M3 8.0 / 10.0 / 12.0						
Max. PV syste	em size (kWp)	DC: 16,0 to 24,0 kWp AC: without restriction						
05.1	1			(	$\supset$			
AC phases	3							
Surge Protect DC / AC	tion Device			Туре	2/-			
Bat	AC (BatInv)							
coupling	DC (Hybrid)							
Bat. charging PV inverter (A				•				
Manufacture	r storage	Br	rD	- <b>A</b> -X	ITEC	‡‡ PYLC	<b>DN</b> TECH	
Storage type		B-Box HVS 5.1 to 12.8	B-Box HVM 8.3 to 22.1	AXIstorage Li SV1 10.1 to 23.6	AXIstorage Li SV2 6.7 to 16.9	Force-H1 10.1 to 23.6	Force-H2 6.7 to 16.9	
Number of sto (tower) / Max (towers) para		2 - 5 / up to 3	3 - 8 / up to 3	3-7/6	2-5/6	3-7/6	2-5/6	
Max. charging tem	g power Sys-	to be calculated de / ta	-		epending on the set able		d depending on the set / table	
Usable capac per unit	ity (kWh)	5,1 to 12,8	8,3 to 22,1	10,1 to 23,6	6,7 to 16,9	10,1 to 23,6	6,7 to 16,9	
Time window from commis	for expansion sioning	Unlin	nited	Up to 5	5 years	Up to 2	years	
Emergency po (separate AC o				, backup	connection			
Battery backu (backup conne i.n. transfer sv	ection inverter,			<b>O</b> , backup	connection			
Full battery b (automatic tra	ackup ansfer switch)			, with Kaco repla	acement power box			
Active PV-mo backup mode								
Interfaces (Heat pump +	FRE)	Connection FRE via connection terminals						
	tricity tariffs, g times, Limi-	Fixed charging times; dynamic electricity tariffs (via Kaco Leaflet HEMS); Limitation by EVU (via Kaco Leaflet HEMS)						
System inform	mation		/R;Up to 3 devices in p			ependent MPP tracker ower classes and bat		



Starrage inves		Plenticore Plus G2 3.0 / 4.2 5.5 / 7.0 / 8.5 / 10 (Plentico			Plenticore MP G3 S/M		G3S / M / L	
Storage inver	ter type	•			rmance depending on and activation level)	, ,	of 4.0 - 20.0 kW)	
Max. PV syste	em size (kWp)	DC: 4,5 to 15,0 (only Hybrid) AC: without restriction		DC: 4,5 to 10,5 (depending on activation level)  AC: without restriction		DC: 6,0 to 30,0 (depending on activation level) AC: without restriction		
1		0			•	(	0	
AC phases	3	•			$\circ$	(	•	
Surge Protect DC / AC	ion Device	-/-		1	Гуре 2 (opt.) / -	Type 2	(opt.) / -	
Bat	AC (BatInv)	(only BI	)	(act	. storage connection)	(with activated	storage connection)	
coupling	DC (Hybrid)	(only Hybi	rid)	(act	. storage connection)	(with activated	storage connection)	
Bat. charging PV inverter (A					0			
Manufacturer	storage	-A- <del>X-</del> I	TEC			PYLONTECH		
Storage type		AXIstorage Li SV1 10.1 to 23.6	AXIstorage Li S to 16.9	V2 6.7	Force-H1 10.1 to 23.6	Force-H2 6.7 to 16.9	Force-H39.7 to 34	
Number of sto (tower) / Max (towers) para		3-7/6	2 - 5 / 6		3-7/6	2-5/6	2-7/6	
Max. charging tem	power Sys-	to be calculated depending on the set / ta		able	ole to be calculated depending on t		he set / table	
Usable capaci per unit	ty (kWh)	10,1 to 23,6 6,7 to 16,9		ı	10,1 to 23,6	6,7 to 16,9	9,69 to 34,01	
Time window from commiss	for expansion sioning	Up to 5 years		Up to 2 years				
Emergency po (separate AC o		$\circ$		0				
Battery backu (backup conne i.n. transfer sv	ection inverter,	0				0		
Full battery be (automatic tra		$\circ$			<b>O</b> , manua	ally with Kostal Backup S	witch	
Active PV-mo	dules in	0				•		
Interfaces (Heat pump +	FRE)	Connection heat pump via S Connection FRE via connect	•	Connec termina		Ready contact; Connection	on FRE via connection	
SMART Charg Dynamic elect fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-	Fixed charging times;Dynar tariffs; Limitation by EVU (v	•	Fixed charging times;Dynamic electricity tariffs; Limitation by EVU (via K G2)			ation by EVU (via KSEM	
3-phase AC / DC coupled storage system (hybrid / memory-WR) Plenticore Plus G2: 3-phase PV / hybrid / storage inverter withPV inverter via AC coupling: Battery connection must be activated via activation		e AC / DC coupled e system (hybrid / e-WR) 2 versions (S th up to 2 additional evels; FrActivation vation code (Plenti-	3-phase AC / DC couple (hybrid / memory-WR) 3 versions (S / M / L) w performance levels eac activation code (Plenti- hybrid / storage inverti inverter via AC coupling must be activated via a	Plenticore G3: ith 2 additional th; activation via Coins);3-phase PV / er with additional PV g; Battery connection				

<sup>\*</sup>In Germany limited to 4.6 kW in single-phase operation (VDE-AR-N 4105) // \*\*With suitable PV inverter // \*\*\*Availability /Release according to manufacturer's specification // All information without guarantee and subject to reservation according to manufacturer's approval.

Please note the instructions at the end of the document.



		Plenticore Plus G2			Plent		Ple	enticore G3S / M / L
Storage inver	ter type	5.5 / 7.0 / 8.5 / 10( Plus 3.0 with BYD F	•	(P	MP G	3 S/M depending on	(Power o	depending on version and
		Plenticore BI 5.5 / 2	* '			tivation level)	activatio	on level of 4.0 - 20.0 kW)
		DC: (1 E +=	15 O (III II-III)	DC	: 4,5 to 10,5	(depending on	DC: 6,0 to 30,0	
Max. PV syste	em size (kWp)		15,0 (only Hybrid) hout restriction		activation level)		(depending on activation level)	
					AC: without restriction		AC: without restriction	
AC phases	1	0						0
	3		•			)		•
Surge Protect DC / AC	ion Device		- / -		Type 2 (	opt.) / -		Type 2 (opt.) / -
Bat	AC (BatInv)		(only BI)	•	(act. storag	ge connection)	(with ac	tivated storage connection)
coupling	DC (Hybrid)	• (	only Hybrid)		(act. storag	ge connection)	(with ac	tivated storage connection)
Bat. charging						$\overline{}$		
PV inverter (A	C-coupling)						10	
Manufacturer	storage		BAD			ENE	R G Y	<b>₩</b> VARTA
Storage type		B-Box HVS /+ 5.1 to 12.8	B-Box HVM /+ 11.0 to 22.1		HVB 5.9 to 29.6	SIMPO HV	6.4 to 28.8	VARTA.wall 10.0 / 15.0 / 20.0
Number of sto (tower) / Max (towers) para		2 - 5 / to 3	4 - 8 / to 3	2 -	10 / 3	2 - 9	9/-	2-4/-
Max. charging	power Sys-	to be calculated depending on the set / table						
Usable capaci per unit	ty (kWh)	5.1 to 12.8 11.0 to 22.1 5.		5.94	to 29.69	6.4 to	28.8	10.0 to 20.0
Time window from commiss		Unlim			d			Up to 1.5 years
Emergency po (separate AC o		0					$\bigcirc$	
Battery backu								
(backup conne i.n. transfer sv	ection inverter, vitch)	0			0			
Full battery be		0			, manually with Kostal Backup Switch			
Active PV-mobackup mode	dules in		$\circ$				•	
Interfaces (Heat pump +	CDC)	•	ump via SG Ready conta		Connection heat pump via SG Ready contact; Connection FRE via connection			
		CONTRECTION FRE VId	. comection terminals	tel	minals			
SMART Charging Features Dynamic electricity tariffs, fixed charging times, Limitation by EVU according to EnWG §14a  Fixed charging times;Dynamic electricit tariffs; Limitation by EVU (via KSEM G2)			Fix G2)		times;Dynamic	mic electricity tariffs; Limitation by EVU (via KSEM		
System information		3-phase AC / DC coupled storage system (hybrid / memory-WR) Plenticore Plus G2: 3-phase PV / hybrid / storage inverter withPV inverter via AC coupling; Battery connection must be activated via activation code;		2: sto thPV on pov	1-phase AC / DC coupled ( storage system (hybrid / storage-WR) 2 versions (S / M) with up to 2 additional power levels; FrActivation via activation code (Plenti-Coins); i		3-phase AC / DC coupled storage system (hybrid / memory-WR) Plenticore G3: 3 versions (S / M / L) with 2 additional performance levels each; activation via activation code (Plenti-Coins);3-phase PV / hybrid / storage inverter with additional PV; inverter via AC coupling; Battery connection must be activated via activation code;	



r type	Sunny Island 4.4M / 6.0H / 8.0H				
ı size (kWp)	AC: without restriction **				
1	•				
3	•				
n Device	/				
C (BatInv)	•				
C (Hybrid)	0				
a separate -coupling)	•				
torage	BY				
	B-Box LVS 4.0 to 24.0	B-Box LVL 15.4			
ages per unit Jnits el	1 - 6 / up to 16 (16.0)	1 / up to 64			
oower Sys-	to be calculated depend	to be calculated depending on the set / table			
(kWh)	4,0 to 24,0	15,4			
or expansion oning	Unlimi	ted			
<mark>/er</mark> imp)	0				
<b>light</b> tion inverter, tch)	0				
k <b>up</b> sfer switch)	, with Enwitec Backup Box (1-/3-pl	nase, 1-phase with phase coupling			
ıles in	•*	*			
RE)	Connection FRE depends on the PV-WR				
g Features icity tariffs, imes, Limi- ccording to	Fixed charging times Limitation by EVU (via Home Manager)				
ystem information  1/3-phase AC coupled storage system with suitable PV inverter; use as a pure offgrid system (PV + generator) processes and processes and pure offgrid system (PV + generator) processes and processes and pure offgrid system (PV + generator) processes and processes and pure offgrid system (PV + generator) processes and pure offgrid system (PV +					
	1 3 n Device C (BatInv) C (Hybrid) a separate coupling) torage  ages per unit Juits el ower Sys- r (kWh) ar expansion oning rer imp) light tion inverter, tch) kup sfer switch) ales in  RE) g Features city tariffs, imes, Limi- ccording to	1 3 In Device  C (BatInv) C (Hybrid) C (Hybrid) C separate coupling) C torage  B-Box LVS 4.0 to 24.0  Auges per unit Juits Linits Lin			

<sup>\*</sup>In Germany limited to 4.6 kW in single-phase operation (VDE-AR-N 4105) // \*\*With suitable PV inverter // \*\*\*Availability /Release according to manufacturer's specification // All information without guarantee and subject to reservation according to manufacturer's approval.

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Storage inverter type		Su	unny Boy Smart Energy 3.6 / 4.0 / 5.0* /	6.0*			
Max. PV syste	em size (kWp)	DC: 7,2 to 12,0 AC: without restriction					
AC phases	1		•				
rie pilases	3						
Surge Protect DC / AC	tion Device		/				
Bat	AC (BatInv)		•				
coupling	DC (Hybrid)		•				
Bat. charging PV inverter (A			•				
Manufacture	rstorage	(B't	פי	SMA			
Storage type		B-Box HVS 5.1 to 10.2 ***	B-Box HVM 8.3 to 22.1 ***	Home Storage 3.2 to 13.1			
Number of sto (tower) / Max (towers) para		2 - 4 / up to 3 3 - 8 / up to 3		1-4/-			
Max. charging tem	g power Sys-	to be calculated depen	ding on the set / table	to be calculated depending on the set			
Usable capac per unit	ity (kWh)	5,1 to 10,2	8,3 to 22,1	3,28 to 13,12			
Time window from commis	for expansion sioning		Unlimited				
Emergency po (separate AC o	clamp)		, PLC / Backup connection				
Battery backu (backup conne i.n. transfer sv	ection inverter,	<b>O</b> , bacl	kup connection (Release is currently stil	l pending)			
Full battery b (automatic tra	ackup ansfer switch)		$\circ$				
Active PV-mo backup mode			•				
Interfaces (Heat pump +	FRE)	WP via SG Ready Contact					
SMART Charg Dynamic elec fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-	Fixed charging times; Dynamic electricity tariffs (via Home Manager 2.0); Limitation by EVU (via Home Manager)					
System inform	nation	1-phase DC-coupled hybrid unit with addit ShadeFix shadow management	tional PV inverter via AC coupling; 3 MPP	T with low input voltage; AFCI integrated;			



Storage inver	ter type	Sunny Tripower 5.0 / 6.0 / 8.0 / 10.0 Smart Energy					
Max. PV syste	em size (kWp)	DC: 7,5 to 15,0 AC: without restriction					
	1		(	$\supset$			
AC phases	3						
Surge Protec DC / AC	tion Device		Туре 2	/ Type 2			
Bat	AC (BatInv)						
coupling	DC (Hybrid)			•			
Bat. charging PV inverter (A	via separate AC-coupling)						
Manufacture	r storage	B'r	פֿי	SMA	<b>₩</b> VARTA		
Storage type		B-Box HVS 5.1 to 12.8 ***	B-Box HVM 11 to 22.1 ***	Home Storage 6.5 to 16.4	VARTA.wall 10.0 / 15.0 / 20.0		
Number of st (tower) / Max (towers) para		2 - 5 / up to 3		2-5/-	2-4/-		
Max. chargin tem	g power Sys-	to be calculated depen	ding on the set / table	depending on the set / table	To calculate depending on the set / Table to be taken		
Usable capac per unit	ity (kWh)	5,1 to 12,8	11,0 to 22,1	6,56 to 16,4	10.0 to 20.0		
Time window from commis	for expansion sioning		Unlimited		Up to 1.5 years		
Emergency po (separate AC			(				
Battery back (backup conn i.n. transfer s	ection inverter,		•, backup	o connection			
Full battery b	oackup ansfer switch)		(				
Active PV-mo							
Interfaces (Heat pump +	FRE)	WP via SG Ready contact; Connection FRE via 5 x DI contact					
Dynamic electric fixed chargin	ging Features stricity tariffs, g times, Limi- J according to	Fixed charging times; Dynamic electricity tariffs (via Home Manager 2.0); Limitation by EVU (via Home Manager)					
System infor	mation	3-phaseDC-coupled hybrid devi	ice with additional PV inverter v	via AC coupling; ShadeFix shadow	v management		

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Please note the instructions at the end of the document.

# **SCFAR**

Storage inver	ter type		HYD 5 /	6 / 8 KTL			HYD 10 / 15 / 20 KTL		
Max. PV syste	em size (kWp)		•	i to 12,0 t restriction		DC: 15,0 to 30,0 AC: without restriction			
0.5	1				$\circ$	1			
AC phases	3				•				
Surge Protect DC / AC	tion Device				Type 2 / Type 2				
Bat	AC (BatInv)				•				
coupling	DC (Hybrid)				•				
Bat. charging PV inverter (A					•				
Manufacture	r storage	*	PYLONTEC	CH	SCI	FAR	-A-X-	ITEC	
Storage type		Force-H1 13.5 to 23.6	Force-H2 10.1 to 16.9	Force-H39.7 to 34		BTS-D5 E5 to E20		AXIstorage Li SV2 6.7 to 16.9	
Number of sto (tower) / Max (towers) para		4-7/6	2-5/6	2-7/6		/ up to 2 4 - 7 / 6 2 - 5 / 6		2-5/6	
Max. charging tem	g power Sys-			to be calculate	ed depending on	the set / table			
Usable capac per unit	ity (kWh)	13,5 to 23,6	6,7 to 16,9	9.69 to 34.01	4,75	to 19,0	13,5 to 23,6	6,7 to 16,9	
Time window from commis	for expansion sioning		Up to 2 years		Unli	mited	Up to 5	5 years	
Emergency po (separate AC o				t	<b>o</b> backup connectio	n			
Battery backu (backup conn i.n. transfer sv	ection inverter,			t	backup connectio	n			
Full battery b (automatic tra	ackup ansfer switch)				$\circ$				
Active PV-mo backup mode					•				
Interfaces (Heat pump +	FRE)	Control of heat pump possible; Connection FRE vi connection terminals					nection FRE via		
	tricity tariffs, g times, Limi-	Fixed charging times; Dynamic electricity tariffs (via Sofar EMS  Box); Limitation by EVU  Fixed charging times; Dynamic electricity tariffs (via Sofar EMS Box); Limitation by EVU  Sofar EMS Box); Limitation by EVU				tricity tariffs (via			
System infor	mation	in grid-coupled p	3-phase DC or AC coupled hybrid device with additional PV inverter via AC coupling; 1 battery connection; up to 10 GerPossit n grid-coupled parallel operation (VDE 4110 is available); in backup mode only 6 devices are possible in parallel; use of hyb as off-grid system (with / without generator) possible; control for external NA protection possible						

### solaredge

Storage inver	ter type	HD-WAVE StorEdge RWS SE 2200H / 3000 / 3500H / 3680H / 4000H / 5000H*/ 6000H*	RWB Home Hub Inverter*** SE3000H / SE3680H / SE4000H / SE5000H* / SE6000H*			
Max. PV syste	em size (kWp)	DC: 3,4 to 7,8 AC: without restriction	DC: 10,0 to 15,0 AC: without restriction			
	1	•	0			
AC phases	3	0	•			
Surge Protect DC / AC	tion Device		/-			
Bat	AC (BatInv)					
coupling	DC (Hybrid)					
Bat. charging PV inverter (A						
Manufacture	r storage	solan <u>edge</u>	solar <u>eoge</u>			
Storage type		Home Battery HV	Home Battery HV			
Number of sto (tower) / Max (towers) para		1 / up to 3	1 / up to 3			
Max. charging tem	g power Sys-	to be calculated depending on the set / table				
Usable capac per unit	ity (kWh)	9,7	9,7			
Time window from commis	for expansion sioning	Unlimited	Unlimited			
Emergency po (separate AC o		(				
Battery backu (backup conne i.n. transfer sv	ection inverter,	(				
Full battery b (automatic tra	ackup ansfer switch)	0	with Home Backup Interface 1P***			
Active PV-mo backup mode		0	•			
Interfaces (Heat pump +	FRE)	Connection of heat pump via SE Smart Home components; Con	nection FRE via RPI connections inverter			
SMART Charging Features Dynamic electricity tariffs, fixed charging times, Limi- tation by EVU according to EnWG §14a		Fixed charging times; dynamic electricity tariffs (with SolarEd <u>c</u>	ge ONE); Limitation by EVU (with the SolarEdge ONE Controller)			
System information		1-phase DC or AC-coupled hybrid device with additional PV inverter via AC coupling	1-phase DC or AC-coupled hybrid device with additional PV inverter via AC coupling; Backup application only possible in 1P networks			
			I.			

<sup>\*</sup>In Germany limited to 4.6 kW in single-phase operation (VDE-AR-N 4105) // \*\*With suitable PV inverter // \*\*\*Availability /Release according to manufacturer's specification // All information without guarantee and subject to reservation according to manufacturer's approval.

## solar<u>edge</u>

Storage inver	ter type		RWS StorEdge Hybrid 5/7/8/10			e Hub Inverter 3 / 10	
Max. PV syste	em size (kWp)		DC: 6.5 to 13.5 AC: without restriction		DC: 10.0 to 15.0 AC: without restriction		
	1			$\circ$	'		
AC phases	3			•			
Surge Protect DC / AC	tion Device			-/-			
Bat	AC (BatInv)			•			
coupling	DC (Hybrid)			•			
Bat. charging PV inverter (A				•			
Manufacture	rstorage	BYD	solar	yedge/	solar	edge'	
Storage type		B-Box LVS 4.0 to 24.0	Home Battery LV 4.6 to 23.0	Home Battery LV (W) 4.85 to 23.25 ***	Home Battery LV 4.6 to 23.0	Home Battery LV (W) 4.85 to 23.25 ***	
Number of sto (tower) / Max (towers) para		1-6/-	1-5/-	1 - 4 / -	1-5/-	1-4/-	
Max. charging tem	g power Sys-	to be calculated depen- ding on the set / table	to be calculated deper	nding on the set / table	to be calculated depending on the set / tabl		
Usable capaci per unit	ity (kWh)	4,0 to 24,0	4,6 to 23,0	4.85 to 19.4	4,6 to 23,0	4.85 to 19.4	
Time window from commiss	for expansion sioning	Unlimited , only 1 tower	Unlii	mited	Unlimited		
Emergency po (separate AC o				0			
Battery backu (backup conne i.n. transfer sv	ection inverter,			0			
Full battery b (automatic tra			0		with Home Back	kup Interface 3P	
Active PV-mo backup mode			0		•		
Interfaces (Heat pump +	FRE)	Connection of heat pump via SE Smart Home components; Connection FRE via RPI connections inverter					
SMART Charg Dynamic elect fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-	Fixed charging times; dynamic electricity tariffs (with SolarEdge ONE); Limitation by EVU (with the SolarEdge ONE Contro					
System inform	nation	3-phase DC or AC couplec ***,; With additional PV in		vices in parallel operation	3-phase DC or AC couple to 3 devices in parallel o inverter active in emerge from 01.01.25 with 4.85 k	peration (only master ency mode) ***, memory	



Storage inver	rter type		5.0-D / 6.0-D / 8.0-D X3-Hyb	G4.2 (Version D) / 10.0-D / 12.0-D / 15.0-D orid-G4 PRO / 10.0-P / 12.0-P / 15.0-P			
Max. PV syste	em size (kWp)	DC: 8,0 to 30,0 AC: without restriction					
	1			0			
AC phases	3			•			
Surge Protect DC / AC	tion Device		Type 2 / Type 2	2 (only PRO Version)			
Bat	AC (BatInv)			•			
coupling	DC (Hybrid)			•			
Bat. charging PV inverter (A				•			
Manufacture	r storage		X	<b>SOLAX</b> POWER			
Storage type		T-BAT H 3.0 6.0 / 9.0 / 12.0	T-BAT HV-S 2.5 7.5 bis 32.5 T-BAT HV-S 3.6 7.2 to 46.8 T-BAT-HV-S 5.115.3 to				
Number of st (tower) / Max (towers) para		2-4/-	3-13/- 2-13/- 3-13/3				
Max. chargin tem	g power Sys-		to be calculated dep	ending on the set / table			
Usable capac per unit	ity (kWh)	5,58 to 11,16	6.9 to 29.9	6.5 to 43.1	13,7 to 59,8		
Time window from commis	for expansion sioning	Up to 1 year		Unlimited			
Emergency po (separate AC				•			
Battery back (backup conn i.n. transfer s	ection inverter,			•			
Full battery b	oackup ansfer switch)		With Solax X3-Mate-Box G2	Caskade with X3 EPS parallel box			
Active PV-mo				•			
Interfaces (Heat pump +	FRE)	Connection HeatPump (via Solax adapter box G2); Connection FRE via Solax Datahub1000					
fixed chargin	ging Features stricity tariffs, g times, Limi- J according to	Fixed charging times; dynamic electricity tariffs; Limitation by EVU (Integrated terminals / data hub)					
System infor	mation	X3-Hybrid: each 2 MPPT + 1 Bat connection; X3-Hybrid-G4 Pro: depending on the performance class, up to 3 MPPT + 2 Bat connections; 3-phase DC or AC-coupled storage system with additional PV inverter via AC coupling; Use of hybrid as offgrid system (with / without generator) possible; Hybrid up to 10 devices in parallel mode (for backup operation X3-EPS Parallel Box notwEndig, only same inverter power classes and battery sizes, EPS outputs synchronized)					

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Storage inver	ter type	X3-IES compact system 5 / 12		1	X3-Ultra Hybrid 5K / 19.9K / 20K / 25K / 30	к	
Max. PV syste	em size (kWp)	DC: 10.0 to 30.0 AC: without restriction		DC: 30,0 to 60,0 kWp AC: without restriction			
1		C	)		$\circ$		
AC phases	3	•	)		•		
Surge Protect DC / AC	ion Device				Type 2 / Type 2		
Bat	AC (BatInv)	•			•		
coupling	DC (Hybrid)	•			•		
Bat. charging PV inverter (A					•		
Manufacture	rstorage	Xso	<b>DLAX</b> POWER		SOLAX		
Storage type		T-BAT HV-S 2.5 7.5 to 32.5	T-BAT-HS50E 10.2 to 30.6	T-BAT HV-S 2.5 7.5 to 32.5	T-BAT HV-S 3.6 7.2 to 46.8	T-BAT-HV-S 5.1 15.3 to 66.5	
Number of sto (tower) / Max (towers) para		3 - 13 / 3	3 - 6 / -	3 - 13 / 2	2 - 13 / -	3 - 13 / 2	
Max. charging tem	g power Sys-	To be calculated depending on the set / Table		to be calculated depending on the set $\emph{/}$ table			
Usable capaci per unit	ity (kWh)	6.9 to 29.9	9.2 to 27.6	6.9 to 29.9	6.5 to 43.1	13,7 to 59,8	
Time window from commiss	for expansion sioning	Unlimited			Unlimited		
Emergency po (separate AC o					•		
Battery backu (backup conne i.n. transfer sv	ection inverter,	•	)		•		
Full battery b		, with Solax X	3-Matebox G2	•,	with Solax X3-EPS Parallel	Вох	
Active PV-mo backup mode				•			
Interfaces (Heat pump +	· · · · · · · · · · · · · · · · · ·		Connection WP (via Solax Adapterbox G2); Connection FRE via 5 x DI				
Dynamic electric fixed charging	Rectricity tariffs, ping times, Limi- VU according to data hub)  Graphy Fixed charging times; dynamic electricity tariffs;Limitation by EVU (Integrated terminals / data hub)		Fixed charging times; dynamic electricity tariffs; Limitation by EVU (Integrated terminals / data hub)				
3-Phase DC coupled storage system; Use of hybrid as offgrid system (with / without generator) possible; devices in parallel operation;		3-phase DC coupled storage system; Use of hybrid as offgrid system (with / without generator) possible; probably up to 10 devices in parallel operation;Execution 15K - 20K With 2 MPPT and 2 x battery; 25 + 30K with 3 MPPT and 2 x battery connection; When using both batter connections the same capacity (tower height) mandatory!					



Storage inve	rter type	SH 5.0 / 6.0 / 8.0 / 10.0 RT-20						
Max. PV syst	em size (kWp)	DC: 5,0 to 15,0 AC: without restriction						
AC phases	1		0					
AC phases	3							
Surge Protec DC / AC	tion Device		Type 2 /	<sup>/</sup> Type 2				
Bat	AC (BatInv)							
coupling	DC (Hybrid)							
Bat. charging PV inverter (/	y via separate AC-coupling)							
Manufacture	rstorage	B'ı	פֿי	<b>‡</b> ; PYLC	DNTECH			
Storage type		B-Box HVS 5.1 to 12.8	B-Box HVM 11.0 to 22.1	Force-H1 13.5 to 23.6	Force-H2 6.7 to 16.9			
Number of st (tower) / Mai (towers) para			4-7/6	2-5/6				
Max. chargin tem	g power Sys-		to be calculated depen	ding on the set / table				
Usable capac per unit	city (kWh)	5,1 to 12,8	11,0 to 22,1	13,5 to 23,6	6,7 to 16,9			
Time window from commis	ofor expansion ssioning	Unlin	nited	Up to 2	years			
Emergency p (separate AC		backup c	connection (can only be used sep	parately per device in parallel op	eration)			
Battery back (backup conn i.n. transfer s	ection inverter,	backup c	onnection (can only be used sep	parately per device in parallel op	eration)			
Full battery to (automatic tr	oackup ansfer switch)		C					
Active PV-mo								
Interfaces (Heat pump +	· FRE)	Connection heat pump via D0 contact;Connection FRE via 4 x DI contact						
Dynamic electric fixed chargin	ging Features ctricity tariffs, g times, Limi- J according to	Fixed charging times, dynamic electricity tariffs (announced - via iHomeManager) Limitation by EVU (via integrated control contact)						
System infor	mation			verter via AC coupling; Up to 2 de d system protection in DE; Only t				

<sup>\*</sup>In Germany limited to 4.6 kW in single-phase operation (VDE-AR-N 4105) // \*\*With suitable PV inverter // \*\*\*Availability /Release according to manufacturer's specification // All information without guarantee and subject to reservation according to manufacturer's approval.

# SUNGROW Clean power for all

					l l		
Storage inver	ter type		SH 5.0 / 6.0 / 8.0 / 10.0 RT	T	SH 15 / 2	20 / 25 T	
Max. PV syste	em size (kWp)		DC: 5,0 to 15,0 AC: without restriction	DC: 30,0 AC: without			
	1			'			
AC phases	3			•			
Surge Protect DC / AC	ion Device			Type 2 / Type 2			
Bat	AC (BatInv)			•			
coupling	DC (Hybrid)			•			
Bat. charging PV inverter (A				•			
Manufacture	rstorage	<b>-A-X</b> -I	HEC	SUNGROW Clean power for all	SUNE Clean pov	SROW ver for all	
Storage type		AXIstorage Li SV1 13.5 to 23.6	AXIstorage Li SV2 6.7 to 13.5	SBR (with RT Serie) 064*** / 096 / 128 / 160 / 192 / 224 / 256	SBH (RT + T Serie) 100 / 150 / 200 / 250 / 300 / 350 / 400	SBR (with T Serie) 128 / 160 / 192 / 224 / 256	
Number of sto (tower) / Max (towers) para		4-7/6	2-5/6	2-8/-	2 - 8 / bis 2	4 - 8 / -	
Max. charging tem	g power Sys-	to be calculated deper	iding on the set / table	depending on the set / table	to be calculated depending on the set / table		
Usable capaci per unit	ity (kWh)	13,5 to 23,6	6,7 to 16,9	6,4 to 25,6	10,0 to 40,0	12,8 to 25,6	
Time window from commiss	for expansion sioning	Up to 5	years	Unlimited	Unlimited	Unlimited	
Emergency po (separate AC o		•	backup connection (can o	nly be used separately pe	per device in parallel operation)		
Battery backu (backup conne i.n. transfer sv	ection inverter,	(can only be used	backup connection separately per device in p	parallel operation)	backup connection (Compl. Domestic load up to 43 kW)		
Full battery b (automatic tra				0			
Active PV-mo backup mode				•			
Interfaces (Heat pump +	FRE)	Connection heat pump	via D0 contact;Connectio	n FRE via 4 x DI contact	Connection heat pump tion FRE via <sup>4</sup>	via D0 contact;Connec- + x DI contact	
SMART Charg Dynamic elect fixed charging tation by EVU EnWG §14a	tricity tariffs, g times, Limi-		ynamic electricity tariffs ( ion by EVU (via integrated	Fixed charging times, dynamic electricity tariffs (Announced - via iHomeManager); Limitation by EVU (Via integrated control contact)			
System inform	mation	via AC coupling; Up t requirements for FRE c	storage system with addi o 2 devices in parallel ope onnection and network a ne inverter performance o	eration; (observe the nd system protection in	operation; (Observe the	s via AC coupling (up to 5 to 4 devices in parallel e requirements for FRE c and system protection inverter performance	



Storage inverter type		SunESS SW 8 / 10 / 12 / 15 KH3UT	
Max. PV system size (kWp)		DC: 12.0 to 22.5 AC: without restriction	
AC phases	1	0	
	3	•	
Surge Protection Device DC / AC		Type 2 / Type 2	
Bat	AC (BatInv)	0	
coupling	DC (Hybrid)		
Bat. charging via separate PV inverter (AC-coupling)		$\circ$	
Manufacturer storage		<b>SUNUDDA</b> ENERGY	
Storage type		SunESS 5.0 / 10.0 / 15.0 / 20.0 / 25.0 / 30.0 / 35.0 / 40.0	
Number of storages per unit (tower) / Max. Units (towers) parallel		1-8/-	
Max. charging power System		to be calculated depending on the set $\prime$ table	
Usable capacity (kWh) per unit		5,0 to 40,0	
Time window for expansion from commissioning		Unlimited	
Emergency power (separate AC clamp)		•	
Battery backup light (backup connection inverter, i.n. transfer switch)		•	
Full battery backup (automatic transfer switch)			
Active PV-modules in backup mode			
Interfaces (Heat pump + FRE)		Heat pump connection via DRM contact; FRE connection via 4 x DRM contacts	
SMART Charging Features Dynamic electricity tariffs, fixed charging times, Limitation by EVU according to EnWG §14a		k.A.	
System information		3-phase hybrid device with additional PV inverter via AC coupling; must always be installed as a complete system including storage; currently no cascading approved	

<sup>\*</sup>In Germany limited to 4.6 kW in single-phase operation (VDE-AR-N 4105) // \*\*With suitable PV inverter // \*\*\*Availability /Release according to manufacturer's specification // All information without guarantee and subject to reservation according to manufacturer's approval.

Please note the instructions at the end of the document.



Storage inverter type		Pulse neo 6	Element Backup	
Max. PV system size (kWp)		AC: without restriction		
AC phases	1	•	0	
	3	0	•	
Surge Protection Device DC / AC		-/-		
Bat coupling	AC (BatInv)			
	DC (Hybrid)			
Bat. charging via separate PV inverter (AC-coupling)		•		
Manufacturer storage		<b>₩</b> VARTA		
Storage type		Pulse neo	Element 6 / 12 /18	
Number of storages per unit (tower) / Max. Units (towers) parallel		1/-	1-3/-	
Max. charging power System		To be calculated depending on the set / Table to be found		
Usable capacity (kWh) per unit		5,9	5.9 / 11.7 / 17.7	
Time window for expansion from commissioning		-	Unlimited	
Emergency power (separate AC clamp)		0	, backup connection / box (only active on the master device)	
Battery backup light (backup connection inverter, i.n. transfer switch)		0	, backup connection / box (only active on the master device)	
Full battery b (automatic tra	ackup ansfer switch)	0	0	
Active PV-modules in backup mode		0		
Interfaces (Heat pump + FRE)		AnbiHeat pump via external relay control		
SMART Charging Features Dynamic electricity tariffs, fixed charging times, Limi- tation by EVU according to EnWG §14a		Fixed charging times		
System infor	1-/3-phase AC-coupled storage system; Ideal for storage retrofitting in existing systems; Up to 5 devices can be casca with Varta Link		fitting in existing systems; Up to 5 devices can be cascaded	

# Explanation of The specifications

#### Description

Storage inverter type		Name inverter series and power classes
Max. PV system size (kWp)		DC System size according to manufacturer's specifications *
AC phases	1	1-phase grid connection
	3	3-phase grid connection
Surge Protection Device DC / AC		Specification of integrated overvoltage protection, if applicable also as an additional option
Bat coupling	AC (BatInv)	Definition of battery coupling via AC: Inverter is designed as pure AC-coupled device (e.g. SMA Sunny Island) or can also be used as hybrid inverter without connection of PV modules as bat inverter.
	DC (Hybrid)	Definition of battery coupling via DC: The inverter is designed as a hybrid device and can charge the battery via DC coupling from the directly connected PV modules.
Bat. charging via separate PV inverter (AC-coupling)		Use of a second inverter (same or different manufacturer) for charging the battery storage via AC coupling
Manufacturer storage		Manufacturer storage
Storage type		Name storage types (Compatible variants) Battery sets compatible with this storage system
Number of storages per unit (tower) / Max. Units (towers) parallel		Number of battery modules in individual setups / max. parallel setups Setups
Max. charging power System		maximum charge $/$ discharge power in the respective unit combination $^{\star}$
Usable capacity (kWh) per unit		Usable capacity according to storage manufacturer *
Time window for expansion from commissioning		Possibility of a battery expansion as well as the time window for this from the time of commissioning
Emergency power (separate AC clamp)		Definition: Separate clamp at inverter for external socket(s), which is fed from battery and if possible by solar power.
Battery backup light (backup connection inverter, i.n. transfer switch)		Definition: direct supply of few defined circuits via backup connection at the inverter, if necessary also with switching by backup box (no complete house load)
Full battery backup (automatic transfer switch)		Definition: by means of automatic transfer switch in central main line (according to local regulations) supply of all/defined circuits takes place
Active PV-modules in backup mode		Recharge option in case of grid failure
Interfaces (Heat pump + FRE)		Information on interfaces for heat pumps and FRE cell chemistry
SMART Charging Features Dynamic electricity tariffs, fixed charging times, Limi- tation by EVU according to EnWG §14a		Additional charging modes of the storage system (in addition to PV surplus) with fixed charging times or via external control based on stock market prices, energy supply company specifications, etc.
System information		Additional information on the products

<sup>\*</sup> The respective columns for the appliance series contain different performance classes, therefore all information refers to the smallest and largest appliance in each case, as well as a storage tower/unit. Detailed information can be found in the data sheet.

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