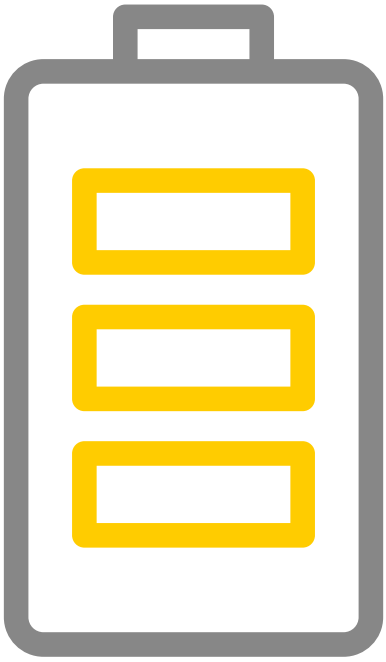
OVERVIEW

STORAGE SYSTEMS



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Inverter manufacturer		ENPHASE		FIMER	Fronius	
Storage inverter type		Enphase Energy AC Storage System 3T	Enphase Energy AC Storage System 10T	ABB REACT: 2-UNO-3.6-TL / 2-UNO-5.0-TL*	Hybrid 3.0-3-S / 4.0-3-S / 5.0-3-S	
Max. PV system size (kWp)		AC: no limitations		DC: 5.0 / 6.0 AC: no limitations	DC: 5.0 / 6.5 / 8.0 AC: no limitations	
AC phases	**1**	●		●	○	
	3	●		○	●	
Surge Protection Device	**AC**	-		-	-	
	DC	-		-	type 1 + 2 opt.	
Bat.-coupling	**AC (Bat.-Inv)**	●		○	●	
	DC (Hybrid)	○		●	●	
Bat. charging via separate PV inverter (AC-coupling)		●		○	●	
Manufacturer storage		ENPHASE		FIMER	BYD	
Storage type		AC Storage System		ABB (integrated)	B-Box HVM 8.3 to 22.1	B-Box HVC 7.8 to 23.5***
Max. power charge / discharge (kW)		per 1.28	per 3.84	1.6 to 4.8* / 2.0 to 5.0*	3.0 to 5.0	3.0 to 5.0
Usable capacity (kWh)		per 3.5	per 10.5	4.0 to 12.0	8.3 to 22.1	7.8 to 23.5
Expandable / Time window from commissioning		unlimited		unlimited	unlimited	expected unlimited
Emergency power (separate AC clamp)		○		●	○	
Battery backup light (backup connection inverter, i.n. transfer switch)		○		○	○	
Full battery backup (automatic transfer switch)		○		○	● with Enwitec Backup Box	
Active PV-modules in backup mode		○		●	●	
System informations		module inverter with 1-/3-phase AC-coupled storage system, additional accessories are required for data acquisition		1-phase DC coupled storage system; Connection of the heat pump via potential-free switching contact	3-phase DC coupled storage system; AC coupling additionally possible	
Solutions for larger storage system configurations		1-/3-phase AC coupled storage system with suitable number of micro inverters		1-phase hybrid device with additional PV inverter via AC coupling	3-phase hybrid device with additional PV inverter via AC coupling	

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Observe the notes at the end of the document.

Inverter manufacturer

Fronius

Storage inverter type		PRIMO GEN24 3.0 / 3.6 / 4.0 / 4.6 / 5.0 (not GER) / 6.0 (not GER)			SYMO GEN24 3.0 / 4.0 / 5.0 PLUS***	SYMO GEN24 6.0 / 8.0 / 10.0 PLUS		
Max. PV system size (kWp)		DC: 4.5 to 6.9 AC: no limitations			DC: 4.5 to 15.0 AC: no limitations			
AC phases	**1**	●			○			
	3	○			●			
Surge Protection Device	**AC**	-			-			
	DC	type 1 + 2 opt.			type 1 + 2 opt.			
Bat.-coupling	**AC (Bat.-Inv)**	●			●			
	DC (Hybrid)	●			●			
Bat. charging via separate PV inverter (AC-coupling)		●			●			
Manufacturer storage		BYD			BYD			LG Energy Solution
Storage type		B-Box HVS 5.1 to 7.7	B-Box HVC 10.4 to 18.3***	B-Box HVM 11 to 19.3	B-Box HVS 5.1 to 10.2	B-Box HVC 10.4 to 23.5***	B-Box HVM 11 to 22.1	RESU FLEX 8.6 to 17.2
Max. power charge / discharge (kW)		3.2 to 6.3*	3.2 to 6.3*	3.2 to 6.3*	3.1 to 9.0	3.1 to 9.0	3.1 to 9.0	4.3 to 8.5
Usable capacity (kWh)		5.1 to 7.7	10.4 to 18.3	11.0 to 19.3	5.1 to 30.6	10.4 to 23.5	11.0 to 57.9	8.6 to 34.4
Expandable / Time window from commissioning		unlimited	expected unlimited	unlimited	unlimited	expected unlimited	unlimited	expected unlimited
Emergency power (separate AC clamp)		● 1-phase to PV-point			● 1-phase to PV-Point			
Battery backup light (backup connection inverter, i.n. transfer switch)		○			○			
Full battery backup (automatic transfer switch)		● Backup Box must be assembled by yourself			○	● with Enwitec Backup Box		
Active PV-modules in backup mode		●			●			
System informations		1-phase DC coupled storage system; Connection of heat pump via contact Digital load management. For power classes 5.0 and 6.0 kW no limitation to 4.6 kVA by selection VDE-AR-N 4105 , therefore not applicable in GER.			3-phase DC coupled storage system; Substitute current function only partially usable; Connection of heat pump via contact Digital load management			
Solutions for larger storage system configurations		1-phase hybrid device with additional PV inverter via AC coupling			3-phase hybrid device with high charging power and additional PV inverter via AC coupling			

Inverter manufacturer		GOODWE					
Storage inverter type		GW-EM / ES Hybrid 3048 (only EM)/ 3648 / 5048*			GW S-BP 3600 / 5000* Retrofit		
Max. PV system size (kWp)		DC: 3.9 to 6.5 AC: no limitations			AC: no limitations		
AC phases	**1**	●			●		
	3	○			○		
Surge Protection Device	**AC**	-			-		
	DC	-			-		
Bat.-coupling	**AC (Bat.-Inv)**	○			●		
	DC (Hybrid)	●			○		
Bat. charging via separate PV inverter (AC-coupling)		●			●		
Manufacturer storage		LG Energy Solution	BYD	BYD	LG Energy Solution	BYD	BYD
Storage type		RESU 6.5 to RESU 12	B-Box LVS 4.0 to 24.0	B-Box LVL 15.4	RESU 6.5 to RESU 12	B-Box LVS 4.0 to 24.0	B-Box LVL 15.4
Max. power charge / discharge (kW)		2.5 to 5.0*	2.5 to 5.0*	2.5 to 5.0*	2.5 to 5.0*	2.5 to 5.0*	2.5 to 5.0*
Usable capacity (kWh)		5.9 to 23.4	4.0 to 24.0	15.4 to 30.8	2.9 to 23.4	4.0 to 24.0	15.4 to 30.8
Expandable / Time window from commissioning		unlimited, up to 2 units	unlimited	unlimited	unlimited, up to 2 units	unlimited	unlimited
Emergency power (separate AC clamp)		● Backup port			● Backup port		
Battery backup light (backup connection inverter, i.n. transfer switch)		● Backup port			● Backup port		
Full battery backup (automatic transfer switch)		○			○		
Active PV-modules in backup mode		●			○		
System informations		1-phase DC coupled storage system			1-phase AC coupled storage system		
Solutions for larger storage system configurations		1-phase hybrid device with additional PV inverter via AC coupling			1-phase AC coupled storage system with additional PV inverter via AC coupling		

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Inverter manufacturer		GOODWE							
Storage inverter type		GW-EH Hybrid 3600 - 6000* GW-BH Retrofit 3600 - 6000*							
Max. PV system size (kWp)		DC: 4.8 to 8.0 (only EH) AC: no limitations							
AC phases	**1**	●							
	3	○							
Surge Protection Device	**AC**	-							
	DC	-							
Bat.-coupling	**AC (Bat.-Inv)**	●							
	DC (Hybrid)	●							
Bat. charging via separate PV inverter (AC-coupling)		●							
Manufacturer storage		BYD			PYLONTECH		AXITEC		GOODWE
Storage type		B-Box HVS 5.1 to 12.8	B-Box HVC 10.4 to 23.5***	B-Box HVM 11 to 22.1	96V Force-H1 10.1 to 23.6	96V Force H2 6.7 to 13.5	AXIstorage Li SV1 10.1 to 23.6	AXIstorage Li SV2 6.7 to 13.5	Lynx Home F LX F6.6 to 13.1-H
Max. power charge / discharge (kW)		per 5.1 to 10.0	per 5.1 to 10.0	per 5.1 to 10.0	3.6 to 8.4	4.8 to 9.6	3.6 to 8.4	4.8 to 9.6	3.6 to 6.0*
Usable capacity (kWh)		5.1 to 38.4	10.4 to 70.5	11.0 to 66.3	10.1 to 23.6	6.7 to 13.5	10.1 to 23.6	6.7 to 13.5	6.55 to 13.1
Expandable / Time window from commissioning		unlimited	expected unlimited	unlimited	up to 2 years		up to 2 years		up to 2 years
Emergency power (separate AC clamp)		● Backup port							
Battery backup light (backup connection inverter, i.n. transfer switch)		● Backup port							
Full battery backup (automatic transfer switch)		○							
Active PV-modules in backup mode		●							
System informations		1-phase DC coupled storage system, BH series for AC connection							
Solutions for larger storage system configurations		1-phase hybrid device with additional PV inverter via AC coupling, BH series via AC coupling to matching PV inverter							

Inverter manufacturer		GOODWE				
Storage inverter type		GW ET / ET plus+ Hybrid 5K / 6.5K / 8K / 10K GW BT Retrofit 5K / 6K / 8K / 10K				
Max. PV system size (kWp)		DC: 6.5 to 13.0 (only ET / ET plus+) AC: no limitations				
AC phases	**1**	○				
	3	●				
Surge Protection Device	**AC**	type 2 (only ET plus+)				
	DC	type 2 (only ET plus+)				
Bat.-coupling	**AC (Bat.-Inv)**	●				
	DC (Hybrid)	●				
Bat. charging via separate PV inverter (AC-coupling)		●				
Manufacturer storage		BYD			PYLONTECH	
Storage type		B-Box HVS 5.1 to 12.8	B-Box HVC 10.4 to 23.5***	B-Box HVM 11 to 22.1	96V Force-H1 13.5 to 23.6	96V Force-H2 6.7 to 13.5
Max. power charge / discharge (kW)		per 5.1 to 10.0	per 5.1 to 10.0	per 5.1 to 10.0	4.8 to 8.4	4.8 to 9.6
Usable capacity (kWh)		5.1 to 38.4	10.4 to 70.5	11.0 to 66.3	13.5 to 23.6	6.7 to 13.5
Expandable / Time window from commissioning		unlimited	expected unlimited	unlimited	up to 2 years	
Emergency power (separate AC clamp)		● Backup port				
Battery backup light (backup connection inverter, i.n. transfer switch)		● Backup port				
Full battery backup (automatic transfer switch)		○				
Active PV-modules in backup mode		●				
System informations		3-phase DC coupled storage system; BT series for AC connection; Connection of heat pump via potential-free contact				
Solutions for larger storage system configurations		up to 10 systems in parallel operation (only hybrid) (SEC1000S box necessary, Germany + Austria: all EPS outlets active - not synchronized) *** BT series via AC coupling to matching PV inverter				

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Inverter manufacturer		GOODWE			
Storage inverter type		GW ET / ET plus+ Hybrid 5K / 6.5K / 8K / 10K GW BT Retrofit 5K / 6K / 8K / 10K			
Max. PV system size (kWp)		DC: 6.5 to 13.0 (only ET / ET plus+) AC: no limitations			
AC phases	**1**	○			
	3	●			
Surge Protection Device	**AC**	type 2 (only ET plus+)			
	DC	type 2 (only ET plus+)			
Bat.-coupling	**AC (Bat.-Inv)**	●			
	DC (Hybrid)	●			
Bat. charging via separate PV inverter (AC-coupling)		●			
Manufacturer storage		AXITEC		GOODWE	LG Energy Solution
Storage type		AXIstorage Li SV1 23.5 to 23.6	AXIstorage Li SV2 6.7 to 13.5	Lynx Home F LX F6.6 to 16.4-H	RESU FLEX 8.6 to 17.2
Max. power charge / discharge (kW)		4.8 to 8.4	4.8 to 9.6	5.12 to 10.0	4.3 to 8.5
Usable capacity (kWh)		13.5 to 22.4	6.7 to 13.5	6.55 to 16.38	8.6 to 34.4
Expandable / Time window from commissioning		up to 2 years		up to 2 years	expected unlimited
Emergency power (separate AC clamp)		● Backup port			
Battery backup light (backup connection inverter, i.n. transfer switch)		● Backup port			
Full battery backup (automatic transfer switch)		○			
Active PV-modules in backup mode		●			
System informations		3-phase DC coupled storage system; BT series for AC connection; Connection of heat pump via potential-free contact			
Solutions for larger storage system configurations		up to 10 systems in parallel operation (only hybrid) (SEC1000S box necessary, Germany + Austria: all EPS outlets active - not synchronized) *** BT series via AC coupling to matching PV inverter			

Inverter manufacturer		HUAWEI		KACO new energy.		
Storage inverter type		SUN2000-2 / 3 / 3.68 / 4 / 4.6 / 5* / 6* KT-L1	SUN2000-3 / 4 / 5 / 6 / 8 / 10 KTL-M1	Blueplanet Hybrid 10.0 TL3		
Max. PV system size (kWp)		DC: 3.0 to 9.0 AC: no limitations	DC: 4.5 to 15.0 AC: no limitations	DC: 12.0		
AC phases	**1**	●	○	○		
	3	○	●	●		
Surge Protection Device	**AC**	type 2		-		
	DC	type 2		-		
Bat.-coupling	**AC (Bat.-Inv)**	●	●	○		
	DC (Hybrid)	●	●	●		
Bat. charging via separate PV inverter (AC-coupling)		●	●	○		
Manufacturer storage		HUAWEI		BYD		
Storage type		LUNA2000-5 / 10 / 15-S0		B-Box HVS 5.1 to 10.2	B-Box HVC 10.4 to 23.5***	B-Box HVM 11 to 22.1
Max. power charge / discharge (kW)		2.2 to 5.0*	5.0 / 10.0	5.1 to 10.2	per 5.1 to 10.2	5.1 to 10.2
Usable capacity (kWh)		5.0 to 30.0		5.1 to 30.6	10.4 to 70.5	11.0 to 66.3
Expandable / Time window from commissioning		unlimited		unlimited	expected unlimited	unlimited
Emergency power (separate AC clamp)		● 1-phase with Huawei Backup Box-B0	● 1-phase with Huawei Backup Box-B1	○		
Battery backup light (backup connection inverter, i.n. transfer switch)		● 1-phase with Huawei Backup Box-B0	● 1-phase with Huawei Backup Box-B1	○		
Full battery backup (automatic transfer switch)		○	○	● with Kaco Hy-Switch Backup Box		
Active PV-modules in backup mode		●	●	●		
System informations		1-phase DC coupled storage system	3-phase DC coupled storage system	3-phase DC coupled storage system; EPS-function just with optional activation		
Solutions for larger storage system configurations		1-phase hybrid device with additional PV inverter via AC coupling	up to 3 systems in parallel operation ***, (for 1-phase emergency back up function, Backup Box-B1 required, only active on master device) with additional PV inverter via AC coupling	no coupling with second inverter possible, no manufacturer monitoring portal		

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Inverter manufacturer		KOSTAL Solar Electric				
Storage inverter type		Plenticore Plus 3.0 / 4.2 / 5.5 / 7.0 / 8.5 / 10 (Plenticore Plus 3.0 with BYD HVM only 11.0)				
Max. PV system size (kWp)		DC: 4.5 to 15.0 AC: no limitations				
AC phases	**1**	○				
	3	●				
Surge Protection Device	**AC**	-				
	DC	-				
Bat.-coupling	**AC (Bat.-Inv)**	○				
	DC (Hybrid)	●				
Bat. charging via separate PV inverter (AC-coupling)		●				
Manufacturer storage		AXITEC	BYD			LG Energy Solution
Storage type		AXIstorage Li SH (Energypack)	B-Box HVS 5.1 to 12.8	B-Box HVC 10.4 to 23.5***	B-Box HVM 11.0 to 22.1	RESU FLEX 8.6 to 17.2
Max. power charge / discharge (kW)		2.7 to 4.0	2.7 to 6.5	2.6 to 5.3	2.6 to 5.3	4.3 to 8.5
Usable capacity (kWh)		7.5 to 15.0	5.1 to 38.4	10.4 to 23.5	11.0 to 66.3	8.6 to 34.4
Expandable / Time window from commissioning		unlimited	unlimited	expected unlimited	unlimited	expected 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		○				
System informations		3-phase DC coupled storage system; Connection of heat pump via potential-free contact				
Solutions for larger storage system configurations		3-phase hybrid device with additional PV inverter via AC coupling				

Inverter manufacturer		KOSTAL Solar Electric						
Storage inverter type		Plenticore BI 5.5 / 26 and 10 / 26				Piko MP Plus 1.5-1 / 2.0-1 / 2.5-1		
Max. PV system size (kWp)		AC: no limitations				DC: 2.3 to 3.75 AC: no limitations		
AC phases	**1**	○				●		
	3	●				○		
Surge Protection Device	**AC**	-				-		
	DC	-				-		
Bat.-coupling	**AC (Bat.-Inv)**	●				●		
	DC (Hybrid)	○				○		
Bat. charging via separate PV inverter (AC-coupling)		●				●		
Manufacturer storage		AXITEC	BYD			BYD		
Storage type		AXIstorage Li SH (Energypack)	B-Box HVS 5.1 to 12.8	B-Box HVC 13.1 to 23.5***	B-Box HVM 13.8 to 22.1	B-Box HVS 5.1 to 7.7	B-Box HVC 7.8 to 10.4***	B-Box HVM 8.3 to 11.0
Max. power charge / discharge (kW)		2.7 to 4.0	5.1 to 10.0	6.6 to 10.0	6.6 to 10.0	1.5 to 2.5	1.5 to 2.5	1.5 to 2.5
Usable capacity (kWh)		12.5 to 15.0	5.1 to 38.4	13.1 to 23.5	13.8 to 66.3	5.1 to 7.7	7.8 to 10.4	8.3 to 11.0
Expandable / Time window from commissioning		unlimited	unlimited	expected unlimited	unlimited	unlimited	expected unlimited	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		○				○		
System informations		3-phase AC coupled storage system				1-phase DC coupled storage system		
Solutions for larger storage system configurations		3-phase battery inverter with high charging power and PV inverter via AC coupling				1-phase hybrid device with additional PV inverter via AC coupling		

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Inverter manufacturer		KOSTAL Solar Electric			LG Life's Good
Storage inverter type		Piko MP Plus 3.0-2 / 3.6-2 / 4.6-2 / 5.0-2*			LG ESS Home 8.0 / 10.0
Max. PV system size (kWp)		DC: 4.5 to 6.9 AC: no limitations			DC: 12.0 / 13.5
AC phases	**1**	●			○
	3	○			●
Surge Protection Device	**AC**	-			-
	DC	-			-
Bat.-coupling	**AC (Bat.-Inv)**	●			○
	DC (Hybrid)	●			●
Bat. charging via separate PV inverter (AC-coupling)		●			●
Manufacturer storage		BYD			LG Life's Good
Storage type		B-Box HVS 5.1 to 12.8	B-Box HVC 7.8 to 23.5***	B-Box HVM 8.3 to 22.1	LG HBC 11H / 15H
Max. power charge / discharge (kW)		2.7 to 4.6	2.0 to 4.6	2.0 to 4.6	5.0 to 7.0
Usable capacity (kWh)		5.1 to 12.8	7.8 to 23.5	8.3 to 22.1	10.6 to 28.4
Expandable / Time window from commissioning		unlimited	expected unlimited	unlimited	expected 1 year, up to 2 units
Emergency power (separate AC clamp)		○			○
Battery backup light (backup connection inverter, i.n. transfer switch)		○			○
Full battery backup (automatic transfer switch)		○			● with Enwitec Backup Box
Active PV-modules in backup mode		○			●
System informations		1-phase DC coupled storage system			3-phase DC coupled storage system; Inverter with 3 MPP Tracker
Solutions for larger storage system configurations		1-phase hybrid device with additional PV inverter via AC coupling			Stand-alone system; no expansion via AC coupling possible

Inverter manufacturer		SMA							
Storage inverter type		Sunny Island 4.4M / 6.0H / 8.0H			Sunny Island 4.4M / 6.0H		Sunny Tripower 5.0 / 6.0 / 8.0 / 10.0 Smart Energy		
Max. PV system size (kWp)		AC: no limitations**					DC: 7.5 to 15.0 AC: no limitations		
AC phases	**1**	●			●		○		
	3	●			○		●		
Surge Protection Device	**AC**	-			-		type 2		
	DC	-			-		type 2		
Bat.-coupling	**AC (Bat.-Inv)**	●			●		○		
	DC (Hybrid)	○			○		●		
Bat. charging via separate PV inverter (AC-coupling)		●			●		●		
Manufacturer storage		AXITEC	BYD		LG Energy Solution		BYD		
Storage type		AXIstorage Li 8S	B-Box LVS 4.0 to 24.0	B-Box LVL 15.4	RESU 6.5	RESU 10 to RESU 12	B-Box HVS 5.1 to 12.8 ***	B-Box HVC 10.4 to 23.5***	B-Box HVM 11 to 22.1 ***
Max. power charge / discharge (kW)		3.3 to 18.0	3.3 to 18.0	3.3 to 18.0	3.3 to 5.0*	3.3 to 5.0*	5.1 to 10.6	10.2 to 10.6	10.2 to 10.6
Usable capacity (kWh)		7.1 to 85.2	4.0 to 24.0	15.4 to 138.6	5.9 to 11.8	8.8 to 23.4	5.1 to 12.8	10.4 to 23.5	11.0 to 22.1
Expandable / Time window from commissioning		up to 6 months	unlimited		unlimited, up to 2 units		unlimited	expected unlimited	unlimited
Emergency power (separate AC clamp)		○			○	○	○		
Battery backup light (backup connection inverter, i.n. transfer switch)		○			○	○	● Backup port		
Full battery backup (automatic transfer switch)		● with Enwitec Backup Box (1- / 3-phase, 1-phase with phase coupling)			○	● with Enwitec Backup Box (1-phase)	○		
Active PV-modules in backup mode		●**			○	●**	●		
System informations		1-/ 3-phase AC coupled storage system; Use as pure offgrid system (PV + generator) possible			1-phase AC coupled storage system		3-phase DC coupled storage system		
Solutions for larger storage system configurations		1- / 3-phase AC coupled storage system with matching PV inverter			1-phase AC coupled storage system with matching PV inverter		3-phase hybrid device with additional PV inverter via AC coupling		

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Inverter manufacturer		SMA				
Storage inverter type		Sunny Boy Storage 2.5 / 3.7 / 5.0 / 6.0*				
Max. PV system size (kWp)		AC: no limitations**				
AC phases	**1**	●				
	3	○				
Surge Protection Device	**AC**	-				
	DC	-				
Bat.-coupling	**AC (Bat.-Inv)**	●				
	DC (Hybrid)	○				
Bat. charging via separate PV inverter (AC-coupling)		●				
Manufacturer storage		AXITEC	BYD			LG Energy Solution
Storage type		AXIstorage Li SH (except SBS 2.5)	B-Box HVS 5.1 to 10.2	B-Box HVC 7.8 to 23.5 (expect SBS 2.5)***	B-Box HVM 8.3 to 22.1 (except SBS 2.5)	RESU 10H + 16H Prime (except SBS 2.5)
Max. power charge / discharge (kW)		2.5 to 6.0*	2.5 to 6.0*	3.7 to 6.0*	3.7 to 6.0*	3.7 to 6.0*
Usable capacity (kWh)		7.5 to 45.0	5.1 to 30.6	7.8 to 23.5	8.3 to 66.3	9.6 to 32.0
Expandable / Time window from commissioning		unlimited	unlimited	expected unlimited	unlimited	unlimited
Emergency power (separate AC clamp)		● (except SBS 2.5)				
Battery backup light (backup connection inverter, i.n. transfer switch)		○				
Full battery backup (automatic transfer switch)		● with Enwitec Backup Box (1-phase with phase coupling; except SBS 2.5)				
Active PV-modules in backup mode		●**				
System informations		1-phase AC coupled storage system; 3 battery inputs on the inverter (except SBS 2.5)				
Solutions for larger storage system configurations		1-phase AC coupled storage system with matching PV inverter				

Inverter manufacturer		solaredge		
Storage inverter type		HD-WAVE SetApp SE 2200H / 3000 / 3500H / 3680H / 4000H / 5000H* / 6000H*	HD-WAVE StorEdge RWS SE 2200H / 3000 / 3500H / 3680H / 4000H / 5000H*/ 6000H*	
Max. PV system size (kWp)		DC: 3.4 to 7.75 AC: no limitations	DC: 3.4 to 7.8 AC: no limitations	
AC phases	**1**	●	●	
	3	○	○	
Surge Protection Device	**AC**	-	-	
	DC	-	-	
Bat.-coupling	**AC (Bat.-Inv)**	●	●	
	DC (Hybrid)	●	●	
Bat. charging via separate PV inverter (AC-coupling)		●	●	
Manufacturer storage		solaredge	solaredge	LG Energy Solution
Storage type		SE Energy Bank	SE Energy Bank	RESU 10H + 16H Prime
Max. power charge / discharge (kW)		5.0	5.0	3.5 to 6.0*
Usable capacity (kWh)		9.7 to 29.1	9.7 to 29.1	9.6 to 16.0
Expandable / Time window from commissioning		unlimited	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		○	○	○
System informations		1-phase DC or AC coupled storage system; Connection of heat pump via SE Smart Home Components	1-phase DC or AC coupled storage system; Connection of heat pump via SE Smart Home Components	
Solutions for larger storage system configurations		1-phase hybrid device with additional PV inverter via AC coupling	1-phase hybrid device with additional PV inverter via AC coupling	

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Inverter manufacturer		solaredge			
Storage inverter type		RWS StorEdge Hybrid 5 / 7 / 8 / 10			RWB48 Home Hub Inverter 5 / 8 / 10
Max. PV system size (kWp)		DC: 6.5 to 13.5 AC: no limitations			DC: 10.0 to 15.0 AC: no limitations
AC phases	**1**	○			○
	3	●			●
Surge Protection Device	**AC**	-			-
	DC	-			-
Bat.-coupling	**AC (Bat.-Inv)**	●		announced	announced
	DC (Hybrid)	●			●
Bat. charging via separate PV inverter (AC-coupling)		●			●
Manufacturer storage		BYD	LG Energy Solution	solaredge	solaredge
Storage type		B-Box LVS 4.0 to 24.0	RESU 6.5 to RESU 12	Home Battery ***	Home Battery
Max. power charge / discharge (kW)		per 3.3 to 5.0	per 4.2 to 5.0	2.8 to 5.0 / 4.0 to 5.0	2.8 to 5.0 / 4.0 to 5.0
Usable capacity (kWh)		4 to 24	5.9 to 23.4	4.6 to 23.0	4.6 to 23.0
Expandable / Time window from commissioning		unlimited, 1 tower only	unlimited, up to 2 units	unlimited	unlimited
Emergency power (separate AC clamp)		○	○	○	○
Battery backup light (backup connection inverter, i.n. transfer switch)		○	○	○	○
Full battery backup (automatic transfer switch)		○	○	● with Home Backup Interface	● with Home Backup Interface
Active PV-modules in backup mode		○	○	●	●
System informations		3-phase DC or AC coupled storage system; Connection of heat pump via SE Smart Home Components			
Solutions for larger storage system configurations		up to 3 systems in parallel operation***, with additional PV inverter via AC coupling			3-phase hybrid device with additional PV inverter via AC coupling

Inverter manufacturer		SOLAX POWER					
Storage inverter type		X1-HYBRID G4 (Version D) 3.0-D / 3.7-D / 5.0-D*		X1-FIT-E Retrofit 3.7 / 5.0*		X3-HYBRID G4 (Version D) 5.0-D / 6.0-D / 8.0-D / 10.0-D / 12.0-D / 15.0-D	
Max. PV system size (kWp)		DC: 4.5 to 7.5 AC: no limitations		AC: no limitations		DC: 8.0 to 18.0 AC: no limitations	
AC phases	**1**	●		●		○	
	3	○		○		●	
Surge Protection Device	**AC**	-		-		-	
	DC	-		-		-	
Bat.-coupling	**AC (Bat.-Inv)**	○		●		○	
	DC (Hybrid)	●		○		●	
Bat. charging via separate PV inverter (AC-coupling)		●		●		●	
Manufacturer storage		SOLAX POWER		SOLAX POWER		SOLAX POWER	
Storage type		T-BAT H 5.8	T-BAT H 3.0 / 6.0 / 9.0 / 12.0	T-BAT H 5.8	T-BAT H 3.0 / 6.0 / 9.0 / 12.0	T-BAT H 5.8	T-BAT H 6.0 / 9.0 / 12.0
Max. power charge / discharge (kW)		3.0 to 5.0*	3.0 to 5.0*	2.3 to 6.9*	3.0 to 5.0*	6.9 to 13.8	6.2 to 12.3
Usable capacity (kWh)		5.2 to 15.6	2.79 to 11.16	5.2 to 15.6	2.79 to 11.16	10.4 to 20.7	5.58 to 11.16
Expandable / Time window from commissioning		up to 1 year	up to 1 year	up to 1 year	up to 1 year	up to 1 year	up to 1 year
Emergency power (separate AC clamp)		● with Solax X1 EPS Backup Box		●		● with Solax X3 EPS Backup Box	
Battery backup light (backup connection inverter, i.n. transfer switch)		● with Solax X1 EPS Backup Box		●		● with Solax X3 EPS Backup Box	
Full battery backup (automatic transfer switch)		○		○		● with Solax X3 EPS Parallel Box	
Active PV-modules in backup mode		●		○		●	
System informations		1-phase DC coupled storage system; Use as pure offgrid system (only PV, without generator) possible; Heat pump connection via Solax adapter box		1-phase AC coupled storage system; Heat pump connection via Solax adapter box		3-phase DC coupled storage system; Use as pure offgrid system (only PV, without generator) possible; Heat pump connection via Solax adapter box	
Solutions for larger storage system configurations		1-phase hybrid device with additional PV inverter via AC coupling		1-phase AC coupled storage system with matching PV inverter		up to 5 systems in parallel operation (X3-EPS Parallel Box P5 required for backup operation, only same inverter power classes and battery sizes, EPS ports synchronized)	

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Inverter manufacturer		SOLAX POWER			SUNGROW Clean power for all		
Storage inverter type		X3-HYBRID G4 (Version M) 6.0-M / 8.0-M / 10.0-M / 12.0-M / 15.0-M	X3-FIT-E Retrofit 8.0 / 10.0*		SH 5.0 / 6.0 / 8.0 / 10.0 RT		
Max. PV system size (kWp)		DC: 10.0 to 18.0 AC: no limitations	AC: no limitations		DC: 5.0 to 15.0 / AC: no limitations		
AC phases	**1**	○	○		○		
	3	●	●		●		
Surge Protection Device	**AC**	-	-		type 2		
	DC	-	-		type 2		
Bat.-coupling	**AC (Bat.-Inv)**	○	●		○		
	DC (Hybrid)	●	○		●		
Bat. charging via separate PV inverter (AC-coupling)		●	●		●		
Manufacturer storage		SOLAX POWER	SOLAX POWER		BYD		
Storage type		T-BAT H 6.0 / 9.0 / 12.0	T-BAT H 5.8	T-BAT H 6.0 / 9.0 / 12.0	B-Box HVS 5.1 to 12.8	B-Box HVC 10.4 to 23.5***	B-Box HVM 11.0 to 22.1
Max. power charge / discharge (kW)		6.2 to 12.3	5.8 to 11.5	6.2 to 12.3	per 6.0 to 10.6	6.0 to 10.6	per 6.0 to 10.6
Usable capacity (kWh)		5.58 to 11.16	10.4 to 20.7	5.58 to 11.16	5.1 to 38.4	10.4 to 23.5	11.0 to 66.3
Expandable / Time window from commissioning		up to 1 year	up to 1 year	up to 1 year	unlimited	expected unlimited	unlimited
Emergency power (separate AC clamp)		○	●		● Backup port (can only be used separately per device during parallel operation)		
Battery backup light (backup connection inverter, i.n. transfer switch)		○	●		● Backup port (can only be used separately per device during parallel operation)		
Full battery backup (automatic transfer switch)		● with Solax X3 Mate Box	○		○		
Active PV-modules in backup mode		● with Solax X3 Mate Box	○		●		
System informations		3-phase DC coupled storage system, use only with X3-Matebox; Heat pump connection via Solax adapter box	3-phase AC coupled storage system; Heat pump connection via Solax adapter box		3-phase DC coupled storage system; Heat pump connection via DO contact		
Solutions for larger storage system configurations		3-phase hybrid device, Stand-alone system with 3-phase Backup power function via X3 Matebox	3-phase AC coupled storage system with matching PV inverter		up to 5 systems in parallel operation (note requirements for FRE connection and NA protection in Germany, only same inverter power classes possible); with additional PV inverter via AC coupling		

Inverter manufacturer		SUNGROW Clean power for all					VARTA	
Storage inverter type		SH 5.0 / 6.0 / 8.0 / 10.0 RT					Pulse neo 6	Element Backup 6 / 12 / 18
Max. PV system size (kWp)		DC: 5.0 to 15.0 / AC: no limitations					AC: no limitations	
AC phases	**1**	○					●	○
	3	●					○	●
Surge Protection Device	**AC**	type 2					-	-
	DC	type 2					-	-
Bat.-coupling	**AC (Bat.-Inv)**	○					●	
	DC (Hybrid)	●					○	
Bat. charging via separate PV inverter (AC-coupling)		●					●	
Manufacturer storage		PYLONTECH		AXITEC		SUNGROW Clean power for all	VARTA	
Storage type		96V Force-H1 13.5 to 23.6	96V Force-H2 6.7 to13.5	AXIstorage Li SV1 13.5 to 23.6	AXIstorage Li SV2 6.7 to 13.5	SBR 096 / 128 / 160 / 192 / 224 / 256	Pulse neo	Element
Max. power charge / discharge (kW)		5.8 to 10.1	5.8 to 11.5	5.8 to 10.1	5.8 to 11.5	per 6.0 to 10.6	2.5 / 2.3	2.2 to 4.0 / 1.8 to 4.0
Usable capacity (kWh)		13.5 to 23.6	6.7 to 13.5	13.5 to 23.6	6.7 to 13.5	9.6 to 25.6	5.9	5.9 / 11.7 / 17.7
Expandable / Time window from commissioning		up to 2 years		up to 2 years		unlimited	-	unlimited
Emergency power (separate AC clamp)		● Backup port (can only be used separately per device during parallel operation)					○	● backup port/box (only active on master device)
Battery backup light (backup connection inverter, i.n. transfer switch)		● Backup port (can only be used separately per device during parallel operation)					○	● backup port/box (only active on master device)
Full battery backup (automatic transfer switch)		○					○	○
Active PV-modules in backup mode		●					○	○
System informations		3-phase DC coupled storage system; Heat pump connection via D0 contact					1-phase AC coupled storage system	3-phase AC coupled storage system
Solutions for larger storage system configurations		up to 5 systems in parallel operation (note requirements for FRE connection and NA protection in Germany, only same inverter power classes possible); with additional PV inverter via AC coupling					AC coupled storage system, 1-/3-phase, ideal for storage retrofitting in existing plants, cascadable up to 5 units with Varta link	

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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	**AC**	Specification of integrated overvoltage protection, if applicable also as an additional option
	DC	
Bat.-coupling	**AC (Bat.-Inv)**	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		Storage type
Max. power charge / discharge (kW)		maximum charge / discharge power in the respective unit combination *
Usable capacity (kWh)		Usable capacity according to storage manufacturer *
Expandable / Time window 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
System informations		Additional system information
Solutions for larger storage system configurations		Details regarding cascadability and special conditions and properties for larger configurations

* The respective columns for the unit series contain different performance classes, therefore all information refers to the smallest and largest unit in each case. Detailed information can be found in the data sheet.

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