C&I STORAGE SYSTEMS



COMMERCIAL INDUSTRIAL UTILITY SCALE



-A-X-ITEC

Type of commercial storage system	AXIhycon 12 / 15 / 20) H + 29.9 / 40 / 50 H	AXIhycon 29.	.9 / 40 / 50 H	
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Self-consumption, Peak-Shaving, Dyn. Electricity tariffs, backup (<10ms)				
Connection of storage / connection of other PV generators		AC + DC - Coupling (Hy	rbrid-WR) / ext.PV-WR		
AC power (kW)	12/15/20/2	29.9/40/50	29.9 /	40 / 50	
Mains connection voltage level		40	0 V		
Number of cascadeable WR / max. Total power AC		Up to 6 WF	R / 300 kVA		
Specified installation location Inverter / storage	Outdoor	/ Indoor	Indoor + Outdoor / Outdoor	Indoor + Outdoor /Indoor*** + Outdoor	
Manufacturer / Model Memory	Axitec AXIstorage Li SV1 10.1 to 23.6	Axitec AXIstorage Li SV2 6.7 to 16.9	BYD Battery-Max Lite 30 to 67.5 (Only AXIhycon 29.9 - 50)	Sunwoda Oasis 60	
Capacity 1 storage unit gross / net (kWh)	10.1 to 23.6 (net)	6.7 to 16.9 (net)	30.0 to 67.5 (net)	60,0 (net)	
Number of storage units per system / Time window for extension	6 units per syste	m / up to 5 years	4 to 9 per unit, up to 2 units / unlimited	3 units per system / un- limited	
Charging cycles ***	-		-	6000	
Cell chemistry	Lf	-P	LFP	LFP	
Backup function / ext. Switching device		•,	, O		
Standardize	VDE 4105				
Standard Warranty System / Memory ***		10 years <i>,</i>	/ 10 years		
Interfaces external communication		WLAN, E	Ethernet		
Energy Management Sys- tem / EZA Regulator	lr	ntegrated (limited range of func	tions) / to be checked individual	ly	
Monitoring Release central mains relay		Via Axite	ec Portal		
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)					
Installers certification possible	0				
Options Commissioning Support		Regular	support		
Weight components (WR, Bat unit) kg / Transport + loading	WR 32,6-73, Bat total 119-259 WR 32,6-73, Bat total 82,5- / Forklift 189 / Forklift		WR 73, Rack 400, Bat 300- 675 / Forklift + Crane	WR 73, Rack 207, Bat 600 / forklift + crane	
System information	12.15, 20, 40, 50 kW with 4 MPPT - 29.9 kW with 3 MPPT; integrated arc detection; storage can be cascaded up to 6 times tegrated arc detection; storage can be cascaded up to 6 times at the storage flexibly scalable with plug-in modules air-cooled				

 $^{^{\}ast}$ Release and compatibility according to manufacturer's specifications

^{**} only possible through the use of external EMS

*** Requirements and assumptions for this information can be found in the manufacturer's documentation and guarantees



Type of commercial storage system	Verto Plus 15.0 / 17.5 / 20.0 / 25.0 / 30.0 / 33.0					
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Self-consumption, Peak-Shaving, Dyn. Electricity tariffs, backup					
Connection of storage / connection of other PV generators	А	C + DC - Coupling (Hybrid-WR) / ext.PV-W	r			
AC power (kW)		15 / 17,5 / 20 / 25 / 30 / 33				
Mains connection voltage level		400 V				
Number of cascadeable WR / max. Total power AC	No	it cascadable according to the current star	tus			
Specified installation location Inverter / storage		Outdoor / Indoor				
Manufacturer / Model Memory	BYD B-Box HVS 5.1 to 12.8	Fronius Reserve 6.3 / 9.5 / 12.6 / 15.8				
Capacity 1 storage unit gross / net (kWh)	5.1 to 12.8 (net)	11.0 to 22.1 (net)	6.3 to 15.8 (net)			
Number of storage units per system / Time window for extension	2 - 5 per eggNheit, up to 3 units parallel / unlimited	4 - 8 per unit, up to 3 units parallel / unlimited	2 - 5 per unit, up to 4 units parallel / up to 2 years			
Charging cycles ***	-	-	-			
Cell chemistry		LFP				
Backup function / ext. Switching device		○,●				
Standardize	VDE 4105 / 4110 (only 25.0 to 33.0)					
Standard Warranty System / Memory ***		10 years / 10 years				
Interfaces external communication		WLAN, Ethernet				
Energy Management Sys- tem / EZA Regulator	Integrated (imited range of functions) / to be checked	d individually			
Monitoring		About Fronius Portal				
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)	\circ					
Installers certification possible	0					
Options Commissioning Support	Regular support					
Weight components (WR, Bat unit) kg / Transport + loading	WR 43, Bat total 91-205 / Forklift WR 43, Bat total 153-319 / Forklift WR 43, Bat total 86,5-187 / Forklift					
System information	15, 17.5, 20, 25, 30, 33 kW with 3 MPPT; integrated Arc Guard arc detection; connection FRE via DI inputs					

GOODHE

Type of commercial storage system	GW ET Hybrid 15K / 20K / 25K / 29.9K / 40K / 50K				
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Own consumption, peak shaving, backup (<10ms)				
Connection of storage / connection of other PV generators		AC + DC - Coupling (Hybrid-WR) / ext.PV-WR		
AC power (kW)		15 / 20 / 25	5 / 29,9 / 40 / 50		
Mains connection voltage level			400 V		
Number of cascadeable WR / max. Total power AC			9.9 ET / 99.7 kW D ET / up to 200 kW		
Specified installation location Inverter / storage		Outdo	oor / Indoor		
Manufacturer / Model Memory	BYD B-Box HVS 5.1 to 12.8 (Only GW ET 15K - 30K)	BYD B-Box HVM 11.0 to 22.1 (Only GW ET 15K - 30K)	Goodwe Lynx Home F plus LX F6.6 to 16.4H (Only GW ET 15K - 30K)	Goodwe Lynx D 5.0 to 40.0 (Only GW ET 15K - 30K)	
Capacity 1 storage unit gross / net (kWh)	5.1 to 12.8 (net)	11.0 to 22.1 (net)	6.55 to 16.38 (net)	5.0 to 40.0 (net)	
Number of storage units per system / Time window for extension	2 units per syste	em / unlimited	2 units per system /Up to 2 years	1 to 8 units per system / unlimited	
Charging cycles ***	-		-	-	
Cell chemistry	LFI	P	LFP		
Backup function / ext. Switching device	•/○				
Standardize		VI	DE 4105		
Standard Warranty System / Memory ***	10 years /	10 years	10 years / 10	years	
Interfaces external communication		WLAI	N, Ethernet		
Energy Management Sys- tem / EZA Regulator	lı		nctions) / to be checked individually		
Monitoring		Via Go	odwe Portal		
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)	•				
Installers certification possible			\circ		
Options Commissioning Support	Remote Commercial Support				
Weight components (WR, Bat unit) kg / Transport + loading	WR 48-65, Bat total 91-205 / Forklift	WR 48-65, Bat total 52-416 / Forklift			
System information	2 separate battery ports; ideal for small toMedium commercial applications; connection FRE via DRM inputs; optional with AFCI				

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GOODWE

Type of commercial storage system	GW ET Hybrid 15K / 20K / 25K / 29.9K / 40K / 50K						
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Own consumption, peak shaving, backup (<10ms)						
Connection of storage / connection of other PV generators		AC + DC - Coupling (Hy	rbrid-WR) / ext.PV-WR				
AC power (kW)		15 / 20 / 25 /	29,9 / 40 / 50				
Mains connection voltage level		40	0 V				
Number of cascadeable WR / max. Total power AC		3 x GW 29.9 4 x GW 40+50 E					
Specified installation location Inverter / storage	Outdoor / Indoor	Outdoor / Indoor	Compl. Outdoor	Compl. Outdoor			
Manufacturer / Model Memory	Goodwe Lynx C 60K	Goodwe Lynx C 60K Goodwe Lynx C LX C 101 / 120 / 138 / 156 (Only GW ET 40K + 50K) BYD Battery-Max Lite 30 to 67.5 (Only GW ET 40K + 50K) Conly GW ET 40K					
Capacity 1 storage unit gross / net (kWh)	60.0 / 60.0	60.0 / 60.0 101/119/138/156 30.0 to 67.5 (net) 48.3					
Number of storage units per system / Time window for extension	3 units / in clarification	3 units / up to 1 year	4 to 9 per unit, up to 2 units / unlimited	6 to 9 per unit, up to 16 units / unlimited			
Charging cycles ***	> 5000	-	-	-			
Cell chemistry		Lf	-p				
Backup function / ext. Switching device		• ,	, O				
Standardize		VDE	4105				
Standard Warranty System / Memory ***		10 years <i>i</i>	/ 10 years				
Interfaces external commu- nication		WLAN, E	Ethernet				
Energy Management Sys- tem / EZA Regulator	Ir	ntegrated (limited range of func	tions) / to be checked individual	ty			
Monitoring Release control mains relay,		Via Good	we Portal				
external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)							
Installers certification possible		(
Options Commissioning Support	Remote Commercial Support						
Weight components (WR, Bat unit) kg / Transport + loading	Complete 1029,5 / Forklift + WR 48-65, Rack 240-290, Bat Crane WR 48-65, Rack 240-290, Bat S80-1360 / Forklift + Crane WR 48-65, Rack 400, Bat S90-585 / Forklift + Crane						
System information	Crane 880-1360 / Forklift + Crane 300-675 / Forklift + Crane 390-585 / Forklift + Crane 2 separate battery ports; ideal for small toMedium commercial applications; connection FRE via DRM inputs; optional with AFCI						



Type of commercial storage system	SUN2000 12/15/	/17/20/25 K MB0	LUNA2000 215-2510
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Own consumption; Dynamic electricity ta	Self-consumption, peak-shaving**	
Connection of storage / connection of other PV generators	AC + DC - Coupling (Hy	brid-WR) / ext.PV-WR	AC coupling (memory WR) / Ext. PV-WR
AC power (kW)	12/15/1	7/20/25	108
Mains connection voltage level		400 V	
Number of cascadeable WR / max. Total power AC	Up to 3 W	R / 75 kVA	Up to 20 WR / 2160 kVA
Specified installation location Inverter / storage	Outdoor	/ Indoor	Compl. Outdoor
Manufacturer / Model Memory	Huawei SUN2000 LUNA 5 / 10 / 15-S0	Huawei SUN2000 LUNA 7 / 14 / 21-S1	Huawei LUNA 2000 -215 kWh (Liquid cooled)
Capacity 1 storage unit gross / net (kWh)	5.0 / 10.0 / 15.0 (Gross = net)	7.0 / 14.0 / 21.0 (Gross = net)	215.0 (Gross = net)
Number of storage units per system / Time window for extension	Up to 2 /	unlimited	Always as a complete unit / unlimited
Charging cycles ***		-	7300
Cell chemistry		LFP	
Backup function / ext. Switching device	, with Backup Box /	- with Smart Guard Box	0
Standardize		VDE 4105/4110	
Standard Warranty System / Memory ***	10 years /	/ 10 years	10 years / 5 years
Interfaces external commu- nication	Ethe	rnet	Ethernet, fiber optic
Energy Management Sys- tem / EZA Regulator	**Via t	third-party providers / to be checked indiv	idually
Monitoring		Via Huawei Portal	I
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)		0	
Installers certification possible		\circ	
Options Commissioning Support	Regular	On-site support	
Weight components (WR, Bat unit) kg / Transport + loading	WR 21, Bat 63.8-163.8 / Forklift WR 21, Bat 80-252 / Forklift		Complete 2800 / Forklift + Crane
System information	Up to 3 systems cascadeable; 2 separate commercial applications; connect	AC-coupled high-voltage storage system for connection to large systems; system with liquid cooling; 20 systems can be cascaded	

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Type of commercial storage system	Powershaper2	Powershaper XL			
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Self-consumption, peak-shaving**				
Connection of storage / connection of other PV generators	AC coupling (memory WR) / ext. PV-WR				
AC power (kW)	50 60				
Mains connection voltage level	40	0 V			
Number of cascadeable WR / max. Total power AC	Up to 20 WR (with 1 x Master Gateway, multiple	gateways with ext.EMS adjustable) / 1200 kVA			
Specified installation location Inverter / storage	Depending on the version Indoor (act	tive fans) + Outdoor (air-conditioned)			
Manufacturer / Model Memory	Pixii LFP	Pixii LFP			
Capacity 1 storage unit gross / net (kWh)	Each 50 / 40.0	201.6 / 181.44			
Number of storage units per system / Time window for extension	Always as a complete unit / unlimited				
Charging cycles ***	4000	7200			
Cell chemistry	LFP	LFP			
Backup function / ext. Switching device	0				
Standardize	VDE 4105/4110				
Standard Warranty System / Memory ***	5 years				
Interfaces external commu- nication	Ethernet, Wifi, 4G, Modl	bus RTU*, TCP/IP, MQTT			
Energy Management Sys- tem / EZA Regulator	Integrated (limited range of funct	tions) / to be checked individually			
Monitoring	Via integrated R	Pixii web server			
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)					
Installers certification possible					
Options Commissioning Support	On-site / Rer	note Support			
Weight components (WR, Bat unit) kg / Transport + loading	WR 30, Rack 220, Bat 450/ Forklift + crane WR 36, Rack 250, Bat 1680 / Forklift + cran				
System information	Modular cabinet system, power parts (Pixii boxes) Hot-plug capable, LFP and NMC cell chemistry to choose from, version rack with / without fan, resp. Air conditioning	Modular cabinet system, power parts (Pixii boxes) hotplug capable, LFP cell chemistry; version rack with fan / air conditioning			



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Type of commercial storage system	CSS-OD
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Self-consumption; Peak-Shaving; Announced: Trading; Dynamic electricity tariffs
Connection of storage / connection of other PV generators	AC coupling (memory WR) / ext. PV-WR
AC power (kW)	50
Mains connection voltage level	400 V
Number of cascadeable WR / max. Total power AC	Up to 10 WR / 500 KVA (announced)
Specified installation location Inverter / storage	Compl. Outdoor or indoor
Manufacturer / Model Memory	SolarEdge CSS-OU-20 Battery Cabinet
Capacity 1 storage unit gross / net (kWh)	102.4 / 97.3
Number of storage units per system / Time window for extension	Up to 2 $/$ - , only complete units
Charging cycles ***	6000
Cell chemistry	LFP
Backup function / ext. Switching device	
Standardize	VDE 4105
Standard Warranty System / Memory ***	10 years
Interfaces external communication	Ethernet, RS485, CAN, Modbus TCP
Energy Management Sys- tem / EZA Regulator	* / to be checked individually
Monitoring	Via SolarEdge Portal
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)	
Installers certification possible	(mandatory for first installation)
Options Commissioning Support	On-site support (included at no extra charge)
Weight components (WR, Bat unit) kg / Transport + loading	WR 68, Cabinet complete 1433 / Forklift + crane
System information	Up to 1 MWh scalable (announced), air conditioning

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Type of commercial storage system	Commercial Storage Solution 30-20	Commercial Storage Solution 50-20			
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Self-consumption, Peak-Shaving, Multi-Use				
Connection of storage / connection of other PV generators	AC coupling (memory WR) / ext. PV-WR				
AC power (kW)	30 50				
Mains connection voltage level	40	0 V			
Number of cascadeable WR / max. Total power AC	Up to 50 WR / 1500 kVA	Up to 50 WR / 2500 kVA			
Specified installation location Inverter / storage	Compl.	Indoor			
Manufacturer / Model Memory	SMA Comme	rcial Storage			
Capacity 1 storage unit gross / net (kWh)	32	56			
Number of storage units per system / Time window for extension	Up to 6 batteries per rack / up to 6 months Up to 4 racks per WR, 50 WR total / unlimited	Up to 10 batteries per rack / up to 6 monthsUp to 4 racks per WR, 50 WR total / unlimited			
Charging cycles ***	8000 (e)	kpected)			
Cell chemistry	NMC				
Backup function / ext. Switching device	Prepared / ext	ernal box SMA			
Standardize					
Standard Warranty System / Memory ***	2 years (by registration 10 years) / 10 year	s (for IBN according to SMA specifications)			
Interfaces external communication	Ethe	rnet			
Energy Management Sys- tem / EZA Regulator	Integrated SMA system manager (up to 5 devices)	/ with SMA Data Manager EDMM-20 (up to 50 WR)			
Monitoring	Via SMA enr	nexOS Portal			
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)	(with I/	'O module)			
Installers certification possible					
Options Commissioning Support	On-site support (mandatory) / Remote suppo	rt for already trained professionals (optional)			
Weight components (WR, Bat unit) kg / Transport + loading	WR 104, Rack 119, Bat 336-560 / Forklift + crane				
System information	Set contains SMA Energy MetHe Commercial, SMA System Manager up to 11 devices integrated in WR, Sunny Design Desi Service				



Type of commercial storage system	Sunny Island X 30-20	Sunny Island X 50-20			
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Self-consumption; Peak-Shaving; Multi-use; Off-grid (additional 3rd party components required)				
Connection of storage / connection of other PV generators	AC coupling (memory WR) / ext. PV-WR				
AC power (kW)	30	50			
Mains connection voltage level	40	0 V			
Number of cascadeable WR / max. Total power AC	Up to 50 WR / 1	500 - 2500 kVA			
Specified installation location Inverter / storage	Indoor + Outdoor /Indoor*** + Outdoor	Indoor + Outdoor / Outdoor			
Manufacturer / Model Memory	Sunwoda Oasis 60	Sunwoda Oasis L215			
Capacity 1 storage unit gross / net (kWh)	60,0 (net)	215,0 (net)			
Number of storage units per system / Time window for extension	3 units per system / unlimited	always as a complete unit with WR / unlimited			
Charging cycles ***	7000 (0.5C)	6000 (0.5C)			
Cell chemistry	LFP	LFP			
Backup function / ext. Switching device	Announced / O				
Standardize	VDE 4105 / 4110				
Standard Warranty System / Memory ***	2Years (by registration 10 years) / 5 years				
Interfaces external communication	Ethe	ernet			
Energy Management Sys- tem / EZA Regulator	Integrated SMA system manager (up to 5 devices)				
Monitoring	Via SMA enr	nexOS Portal			
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)	Yes (with I,	/O module)			
Installers certification possible					
Options Commissioning Support	Regular	support			
Weight components (WR, Bat unit) kg / Transport + loading	WR 104, Rack 400, Bat 300-675 / Forklift + Crane / forklift + crane				
System information	On- and off-grid applications; SMA system manager up to 11 devices integrated in WR; memory flexibly scalable; air-co- oled	On- and off-grid applications;SMA system manager up to 11 devices integrated in WR; storage with liquid cooling			

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SCFAR

Type of commercial storage system	Self-consumption, peak shaving (only 20 KTL), backup (<10ms)					
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Own consumption, backup (<10ms)					
Connection of storage / connection of other PV generators	AC + DC - Coupling (Hybrid-WR) / ext.PV-WR					
AC power (kW)			10/1	5/20		
Mains connection voltage level			40	0 V		
Number of cascadeable WR / max. Total power AC			Up to 10 WI	R / 200 kVA		
Specified installation location Inverter / storage			Outdoor	/ Indoor		
Manufacturer / Model Memory	Pylontech Force H1 13.5 to 23.6	Pylontech Force H2 10.1 to 16.9	Sofar BTS-D5 E5 to E20	Axitec AXIstorage Li SV1 13.5 to 23.6	Axitec AXIstorage Li SV2 10.1 to 16.9	Sunwoda Oasis 60 (Only with HYD 20 KTL)
Capacity 1 storage unit gross / net (kWh)	13.5 to 23.6 (net)	10.1 to 16.9 (net)	4.75 to 19.0 (net)	13.5 to 23.6 (net)	10.1 to 16.9 (net)	60.0 (net)
Number of storage units per system / Time window for extension	6 units per syste	m / up to 2 years	2 units per system / unlimited	6 units per syste	em / up to 5 years	3 units per system / unlimited
Charging cycles ***			-			7000 (0.5C)
Cell chemistry			Lf	-p		
Backup function / ext. Switching device			/ , manua	l switching device		
Standardize		VDE 4	4105 (HYD 10 + 15) / 41	10 (HYD 20 + Power N	Magic)	
Standard Warranty System / Memory ***			5 years / 10 years			5 years / 5 years
Interfaces external communication			Ethe	ernet		
Energy Management Sys- tem / EZA Regulator	Integrate	ed (limited range of fu	ınctions, with ext.Sofa	ar EMS Box expandab	ole) / to be checked in	dividually
Monitoring			About So	far Portal		
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)						
Installers certification possible						
Options Commissioning Support			Regular supp	ort (optional)		
Weight components (WR, Bat unit) kg /	WR 37, Bat total 154-259 / Forklift	WR 37, Bat total 118-189 / Forklift	WR 37, Bat total 57,5-207,5 / Fork-	WR 37, Bat total 154-259 / Forklift	WR 37, Bat total 118-189 / Forklift	WR 104, Rack 207, Bat 600 / Forklift
Transport + loading	22, 3, 3, 1, 1, 1	227.0	lift	22, 3, 3, 4, 1	22, 3, 3, 1, 1, 1	+ crane
System information	Up to 10 systems can be cascaded; 2 separate battery ports; ideal for small to medium-sized commercial applications; connection FRE integrated					

SCFAR

Type of commercial storage system	Power Magic				
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Self-consumption, peak-shaving**				
Connection of storage / connection of other PV generators	AC coupling (memor	ry WR) / ext. PV-WR			
AC power (kW)	12	25			
Mains connection voltage level	400	0 V			
Number of cascadeable WR / max. Total power AC	Up to 12 WR	R / 1500 kVA			
Specified installation location Inverter / storage	Compl. (Outdoor			
Manufacturer / Model Memory	Sofar LFP/280Ah (6 Pack)	Sofar LFP/280Ah (5 Pack)			
Capacity 1 storage unit gross / net (kWh)	258,0	215,0			
Number of storage units per system / Time window for extension	3 racks per system / Bat-Rack only at the same time, entire systems unlimited				
Charging cycles ***	70	00			
Cell chemistry	LFP				
Backup function / ext. Switching device	Announced / announced				
Standardize	VDE 4105 (HYD 10 + 15) / 4110 (HYD 20 + Power Magic)				
Standard Warranty System / Memory ***	5 years /	10 years			
Interfaces external communication	Ethe	rnet			
Energy Management System / EZA Regulator	Integrated (limited range of functions, with ext.Sofa	ar EMS Box expandable) / to be checked individually			
Monitoring	About Sof	far Portal			
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)					
Installers certification possible	Announced				
Options Commissioning Support	On-site support (mandatory)				
Weight components (WR, Bat unit) kg / Transport + loading	Complete 2500 / Forklift + Crane Complete 2800 / Forklift + Crane				
System information	Modular large storage;Parallel operation AC up to 12 systems; Liquid cooling; Fire Protection System				

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Type of commercial storage	X3-Ultra 15K / 19.9K / 20K / 25K / 30K				
system	אס-טווום ואר / וש.ש	K / ZUK / ZJK / JUK	P50B100/P50B200/P60B100/P60B200		
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Own consumption, peak	shaving, backup (<10ms)	Self-consumption, Peak-Shaving, Backup (<10ms), Off-Grid		
Connection of storage / connection of other PV generators	AC + DC - Coupling (Hy	/brid-WR) / ext.PV-WR	AC + DC - Coupling (Hy	brid-WR) / ext.PV-WR	
AC power (kW)	15 / 19,9 / 2	20 / 25 / 30	50 /	⁷ 60	
Mains connection voltage level	40	0 V	40	0 V	
Number of cascadeable WR / max. Total power AC	Up to 10 W	R / 300 kVA	Up to 10 WR /	up to 600 kVA	
Specified installation location Inverter / storage	Outdoor	/ Indoor	Compl. Outdoor (reco	ommended) or indoor	
Manufacturer / Model Memory	Solax T-BAT HV-S 2.5 (7.6 to 33.2)			Solax T-BAT HV-S 5.1 (15.3 bis 66.5)	
Capacity 1 storage unit gross / net (kWh)	7.6 to 33.2 / 6.9 to 29.9	15.3 to 66.5 / 13.7 to 59.8	90,0 / 180,0 (netto)	125,6 bis 66,5 / 23,0 bis 59,8	
Number of storage units per system / Time window for extension	2 units per sysi	tem / unlimited	Compact system / unlimited (only whole systems)	2 Einheiten pro System / unbegrenzt	
Charging cycles ***	>6000	6000	8000	6000	
Cell chemistry	LFP		LFP	LFP	
Backup function / ext. Switching device	/ , with Solax EPS Parallel Box		•/○		
Standardize	VDE	4105	VDE 4105		
Standard Warranty System / Memory ***	10 years ,	/ 10 years	10 years / 10 years		
Interfaces external commu- nication	Ethe	ernet	Ethernet		
Energy Management Sys- tem / EZA Regulator	Integrated / to be o	hecked individually	Yes, to check individua	lly with EMS1000 Pro /	
Monitoring		Via Sola	ax Portal		
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)	•		•		
Installers certification possible					
Options Commissioning Support	Regular	support	ReRegular support (on-sit	e support for first project)	
Weight components (WR, Bat unit) kg / Transport + loading	WR 47, Bat total 94-262 / WR 47, Bat total 156,5-616,5 Forklift / Forklift		WR 105, Rack + Bat 1500- 2700 / Forklift + Crane	WR 105, Bat gesamt 248,5-616,5 / Stapler + Kran	
System information	ideal for small to medium com	aded; 2 separate battery ports; nmercial applications; connec- ia DI inputs	Up to 10 systems can be can battery ports; ideal for small cations;FRE connection via int 4-stage fire pro	to medium commercial appli- tegrated EMS1000 Pro logger;	



Type of commercial storage system	Trene P100B215I (Air cooling)	Trene P125B261L-E (Liquid cooling)	
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Self-consumption, Peak-Shaving, Backup, Off-Grid	Self-consumption, Peak-Shaving, Backup, Off-Grid	
Connection of storage / connection of other PV generators	AC coupling (memory WR) / Ext. PV-WR	AC coupling (memory WR) / Ext. PV-WR	
AC power (kW)	100	125	
Mains connection voltage level	400 V	400 V	
Number of cascadeable WR / max. Total power AC	Open / open	Open / open	
Specified installation location Inverter / storage	Compl. Outdoor	Compl. Outdoor	
Manufacturer / Model Memory	Solax Trene B215I	Solax Trene B215I	
Capacity 1 storage unit gross / net (kWh)	193.5 (net)	234.9 (net)	
Number of storage units per system / Time window for extension	Compact system / unlimited (only whole systems)	Compact system / unlimited (only whole systems)	
Charging cycles ***	8000	8000	
Cell chemistry	LFP	LFP	
Backup function / ext. Switching device	0,0	0,0	
Standardize	VDE 4105/4110	VDE 4105/4110	
Standard Warranty System / Memory ***	10 years / 10 years	10 years / 10 years	
Interfaces external communication	Ethernet	Ethernet	
Energy Management Sys- tem / EZA Regulator	Yes, to check individually with EMS1000 Pro /		
Monitoring Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)	Via Solax Portal		
Installers certification possible	•		
Options Commissioning Support	ReRegular support (on-site support for first project)		
Weight components (WR, Bat unit) kg / Transport + loading	Complete 2800 / Forklift + Crane	Complete 2810 /Forklift + Crane	
System information	Cascadeable; ideal for medium to large commercial applications; FRE connection via integrated EMS1000 Pro logger; 4-stage fire protection concept; KliMatization with air or liquid cooling;		

 $^{^{\}ast}$ Release and compatibility according to manufacturer's specifications

^{**} only possible through the use of external EMS

*** Requirements and assumptions for this information can be found in the manufacturer's documentation and guarantees



Type of commercial storage system	SH 15 / 20 / 25 T		Power Stack
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Self-consumption, Peak-Shaving*, Backup (<10ms)		Self-consumption, peak-shaving**
Connection of storage / connection of other PV generators	AC + DC - Coupling (Hybrid-WR) / ext.PV-WR		AC coupling (memory WR) / ext. PV-WR
AC power (kW)	15 / 20	0 / 25	110
Mains connection voltage level	400 V		400 V
Number of cascadeable WR / max. Total power AC	Up to 4 WR / 100 kVA		Up to 25 WR / 2750 kVA
Specified installation location Inverter / storage	Outdoor / Indoor		Compl. Outdoor
Manufacturer / Model Memory	Sungrow SBR 12.8 to 25.6 (only 1 tower)	Sungrow SBH 150 to 400 (2 towers)	Sungrow ST225kWh
Capacity 1 storage unit gross / net (kWh)	12.8 to 25.6 (net)	Each 15.0 to 40.0 (net)	229.0 / 225.0
Number of storage units per system / Time window for extension	Up to 2 / 1 year *	Up to 2 / 1 year *	Compact system / unlimited (only whole systems)
Charging cycles ***	-	-	6500
Cell chemistry	LFP		LFP
Backup function / ext. Switching device	•/○		0,0
Standardize	VDE 4105		VDE 4105/4110
Standard Warranty System / Memory ***	10 years / 10 years		5 years / 5 years
Interfaces external communication	Ethernet, Wi-Fi		Ethernet
Energy Management Sys- tem / EZA Regulator	Integrated / to be checked individually		With EMS300CP / to be individually checked
Monitoring	About Sungrow Portal		About Sungrow Portal
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)	-		0
Installers certification possible	0		0
Options Commissioning Support	Regular support		On-site support
Weight components (WR, Bat unit) kg / Transport + loading	WR 38, Bat total 147-279 / Forklift	WR 38, Bat total 151-376 / Forklift	Complete 3100 / Forklift + Crane
System information	Backup connection up to 63 A loadable; up to 4 devices in parallel operation; additional PV inverters via AC coupling (up to 5 WR of the CX series); (only the same inverter power classes possible);Connection FRE via DI inputs		Can be cascaded up to 25 times in par- allel with mains; Off-grid up to 10 times; ideal for medium to large commercial applications; Liquid cooling; 3-stage fire protection concept; FRE connection via suitable loggers

Manufacturer Manufacturer's name

Type of commercial storage system	Model / Series	
Application - Scenario (Self- consumption, peak shaving, network expansion avoidance, backup)	Area of application of the system	
Connection of storage / connection of other PV generators	Is the memory DC-coupled (Hybrid-WR) or AC-coupled (memory-WR) usable? How can other WR be connected?	
AC power (kW)	AC power of the inverter	
Mains connection voltage level	Voltage of the mains connection	
Number of cascadeable WR / max. Total power AC	How many inverters can be connected in parallel / resulting total power AC	
Specified installation location Inverter / storage	Requirements for installation location inverter / memory	
Manufacturer / Model Memory	Manufacturer and model of the storage system	
Capacity 1 storage unit gross / net (kWh)	Energy quantity of a storage unit gross / actually usable	
Number of storage units per system / Time window for extension	How large is a memory unit expandable? / In what time frame?	
Charging cycles ***	A full cycle corresponds to a complete loading and unloading. Gives conclusions about the service life / performance.	
Cell chemistry	Material combination of the battery cells. Mostly lithium-iron phosphate (LFP) or lithium-nickel-manganese cobalt (NMC).	
Backup function / ext. Switching device	Is replacement power possible with this system? / How is the switching device, if any?	
Standardize	Certification of the system.	
Standard Warranty System / Memory ***	Guarantees from the manufacturer.	
Interfaces external communication	Integrated interfaces for portal, EVU control, etc.	
Energy Management Sys- tem / EZA Regulator	Does the device include its own energy managementNt system, alternatively performed in a superordinate manner?	
Monitoring	Which portal can be used to monitor the system?	
Release control mains relay, external NA protection, (VDE-AR-N 4105, up to 135 / 270 kVA)	Can the system of aBe controlled by external, central network monitor?	
Installers certification possible	Is a certification for the installer required by the manufacturer?	
Options Commissioning Support	What types of support are possible?Personally on site, only online, etc.	
Weight components (WR, Bat unit) kg / Transport + loading	Weight of individual components / approved by the manufacturer options for unloading + transport	
System information	Additional information about the system, cascading capability, technical features, etc.	

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