

# Solar Batteries



**Solar Batteries** Designed for professional applications, the range encompasses VRLA and wet technology with both tubular and flat plates and a capacity range from 20Ah to 15600Ah.

Solar systems are the most demanding applications for batteries and the correct choice of battery is fundamental to the integrity of the entire system. Batteries are subjected to high and low temperatures, unpredictable charging, daily cycling as well as potentially partial states of discharge.

Therefore it is of utmost importance to choose the right battery for the right application in order to maximise battery life.

Sollatek not only offers the complete range of Solar batteries available in the market but also provides expert advice on the choice of battery to suit your particular application.

In an ideal world the first choice for any solar application would be a wet (also known as flooded or vented) battery with tubular positive plates which would maximise the number of cycles available. These types are ideal for deep discharges.

## Specifications



manufacturer's model	STW	STW (large)	STW (block)
Type Range	wet/flooded/vented	wet/flooded/vented	wet/flooded/vented
Standards	DIN 40736 P1 IEC 60896 P11	DIN 40736 P2 IEC 60896 P11	DIN 40737-3 IEC 60896 P11
Capacity range (C100)	130Ah - 4550Ah	4550Ah - 15600Ah	33Ah - 390Ah
Nominal voltage	2V	2V	6V, 12V
Container material	SAN, clear	PP	PP, high translucent
Positive plate tech	tubular	tubular	tubular
Negative plate tech	grid/flat	grid/flat	grid/flat
Electrolyte	liquid	liquid	liquid
Design life	15 years	20 years	18 years
Cycle life (80% DOD)	1200	1600	1100
Operating temp range °C	-20 to +60	-20 to +60	-20 to +60



However, many solar sites are in remote areas where access is difficult and maintenance is at a premium. Here Sollatek can advise on three different technologies for Valve Regulated Lead Acid (VRLA) batteries (often referred to as maintenance-free batteries).

The first type with the highest number of cycles and the best suitability for long discharge is the VRLA Tubular Gel battery.

The second type of VRLA battery is the gel battery with flat positive plates. However its cycle life will be slightly less. A final option would be the AGM (Absorbed Glass Mat) flat plate battery which has specially designed thick positive plates that makes it suitable for cyclic use.



STG	STG (bloc)	SFG	SFG (bloc)	SGM
gel	gel	gel	gel	absorbed glass matt
DIN 40742 IEC 896-21/22	DIN 40744 IEC 896-21/22	IEC 896-21/22	IEC 896-21/22 MH25860	IEC 896-21/22
260Ah - 3900Ah	65Ah- 390Ah	260Ah - 3900Ah	20Ah - 265Ah	32Ah - 240Ah
2V	6V, 12V	2V	12V	12V
SAN	PP, talcum	ABS	PP or ABS	ABS
tubular	tubular	grid/flat	grid/flat	grid/flat
grid/flat	grid/flat	grid/flat	grid/flat	grid/flat
gel	gel	gel	gel	absorbed liquid
15 years	15 years	15 years	8-10 years	8-10 years
1200	1000	600	400-600	400
-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60

#### KEY


SAN -	Styrene Acrylonitile
PP -	Polypropylene
ABS -	Acrylonitrile Butadiene Styrene
Talcum -	Hydrated magnesium silicate material which is used as an additive

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## Specifications

**STW  
2V TUBULAR WET BATTERIES**




DIN Name	Nominal Voltage	Capacity		Dimensions			Weight KG
		C10	C100	Length	Width	Height	
STW130	2	100	130	103	206	420	14
STW195	2	150	195	103	206	420	16
STW260	2	200	260	103	206	420	17.5
STW325	2	250	325	124	206	420	21
STW390	2	300	390	145	206	420	24.5
STW455	2	350	455	124	206	536	28.5
STW546	2	420	546	145	206	536	32.5
STW637	2	490	637	166	206	536	38.5
STW780	2	600	780	145	206	711	45
STW910	2	700	910	210	191	711	60
STW1040	2	800	1040	210	191	711	61.5
STW1170	2	900	1170	210	233	711	74
STW1300	2	1000	1300	210	233	711	77.5
STW1560	2	1200	1560	210	275	711	90
STW1950	2	1500	1950	210	275	861	112
STW2275	2	1750	2275	212	399	837	138
STW2438	2	1875	2438	212	399	837	148
STW2600	2	2000	2600	212	399	837	154
STW2925	2	2250	2925	212	487	837	188
STW3250	2	2500	3250	212	487	837	196
STW3900	2	3000	3900	212	576	837	228
STW4550	2	3500	4550	212	576	837	245

**STW BLOC  
6V/12V TUBULAR WET BATTERIES BLOC**




DIN Name	Nominal Voltage	Capacity		Dimensions			Weight KG
		C10	C100	Length	Width	Height	
STW33-12	12	25	33	260	175	240	15
STW65-12	12	50	65	310	178	240	23
STW98-12	12	75	98	510	175	245	33
STW130-12	12	100	130	510	216	245	44
STW163-12	12	125	163	510	278	256	54
STW195-12	12	150	195	510	278	256	58
STW260-6	6	200	260	510	216	245	43
STW325-6	6	250	325	510	278	256	53
STW390-6	6	300	390	510	278	256	59

**STW LARGE  
2V TUBULAR WET BATTERIES**



DIN Name	Nominal Voltage	Capacity		Dimensions			Weight KG
		C10	C100	Length	Width	Height	
STW4550	2	3500	4550	440	422	885	359
STW5200	2	4000	5200	440	466	885	378
STW5850	2	4500	5850	440	510	885	440
STW6500	2	5000	6500	440	568	885	470
STW7150	2	5500	7150	440	612	885	530
STW7800	2	6000	7800	440	656	885	565
STW9100	2	7000	9100	440	890	885	710
STW10400	2	8000	10400	440	890	885	755
STW11700	2	9000	11700	440	1090	885	890
STW13000	2	10000	13000	440	1090	885	935
STW14300	2	11000	14300	440	1266	885	1060
STW15600	2	12000	15600	440	1266	885	1110

**STG  
2V TUBULAR GEL BATTERIES**



DIN Name	Nominal Voltage	Capacity		Dimensions			Weight KG
		C10	C100	Length	Width	Height	
STG260	2	200	260	103	206	406	17
STG325	2	250	325	124	206	406	21
STG390	2	300	390	145	206	406	24
STG455	2	350	455	124	206	523	26
STG546	2	420	546	145	206	523	32
STG637	2	490	637	166	206	523	36
STG780	2	600	780	145	206	698	45
STG1040	2	800	1040	210	191	698	63
STG1300	2	1000	1300	210	233	698	78
STG1560	2	1200	1560	210	275	698	88
STG1950	2	1500	1950	210	275	848	104
STG2600	2	2000	2600	214	399	824	140
STG3250	2	2500	3250	214	497	824	176
STG3900	2	3000	3900	214	576	824	205



**STG BLOC**  
6V/12V TUBULAR GEL BATTERIES BLOC



DIN Name	Nominal Voltage	Dimensions		Dimensions			Weight KG
		C10	C100	Length	Width	Height	
STG65-12	12	50	65	272	205	383	38
STG130-12	12	100	130	272	205	383	52
STG195-12	12	150	195	380	205	383	74
STG260-6	6	200	260	272	205	383	51
STG325-6	6	250	325	380	205	383	66
STG390-6	6	300	390	380	205	383	73

**SFG BLOC**  
12V FLAT PLATE GEL BATTERIES



DIN Name	Nominal Voltage	Dimensions		Dimensions			Weight KG
		C10	C100	Length	Width	Height	
SFG41-12	12	33	41	195	130	155	10
SFGM36-12	12	28	36	197	130	184	11
SFG50-12	12	40	50	197	165	170	12.7
SFGM48-12	12	37	48	197	168	175	14.4
SFGM57-12	12	44	57	236	140	235	17
SFG69-12	12	55	69	239	132	205	17
SFGM70-12	12	53	70	259	169	178	19.3
SFG81-12	12	65	81	350	167	179	21.7
SFGM84-12	12	68	84	276	171	251	24.3
SFGM100-12	12	80	100	324	171	251	28.7
SFGM110-12	12	90	110	329	171	251	32.5
SFG113-12	12	90	113	306	169	210	28.5
SFG125-12	12	100	125	330	171	214	27.5
SFG150-12	12	120	150	410	176	227	38
SFGM210-12	12	170	210	527	216	254	59
SFG188-12	12	150	188	485	172	240	47
SFG250-12	12	200	250	522	238	218	66.5
SFGM265-12	12	210	265	527	279	254	73
SFG288-12	12	230	288	520	269	203	72.6

**SFG**  
2V FLAT PLATE GEL BATTERIES

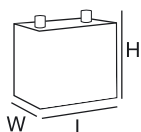


DIN Name	Nominal Voltage	Dimensions		Dimensions			Weight KG
		C10	C100	Length	Width	Height	
SFG2-260	2	200	260	173	111	330	15
SFG2-390	2	300	390	171	151	330	21
SFG2-520	2	400	520	210	176	330	28
SFG2-650	2	500	650	241	175	330	33
SFG2-780	2	600	780	302	175	330	42
SFG2-1040	2	800	1040	410	175	330	57
SFG2-1300	2	1000	1300	475	175	330	66.5
SFG2-1560	2	1200	1560	400	350	345	82
SFG2-1950	2	1500	1950	400	350	345	98
SFG2-2600	2	2000	2600	490	350	345	123
SFG2-3250	2	2500	3250	710	350	345	175
SFG2-3900	2	3000	3900	710	350	345	186

**SGM**  
12V FLAT PLATE AGM GEL BATTERIES



DIN Name	Nominal Voltage	Dimensions		Dimensions			Weight KG
		C20	C100	Length	Width	Height	
SGM32-12	12	27	32	166	175	125	8.5
SGM50-12	12	42	50	196	163	174	13.8
SGM66-12	12	55	66	229	138	212	18.5
SGM78-12	12	65	78	271	166	190	23.2
SGM84-12	12	70	84	350	166	174	22.6
SGM96-12	12	80	96	260	169	212	27.2
SGM120-12	12	100	120	329	172	214	32.8
SGM144-12	12	120	144	407	173	215	38
SGM180-12	12	150	180	485	170	231	46.8
SGM240-12	12	200	240	520	260	204	68



Figures given for height include battery terminals