











Industrial Batteries – Network Power
Sonnenschein SOLAR
Safe storage capacity for renewable energy.

Specifications

The compact alternative for smaller solar applications.

Sonnenschein SOLAR batteries are specially designed for small to medium performance requirements in leisure and consumer applications. The advantages of the maintenance free VRLA-batteries are enhanced by the worldwide high reputation and technical image of the dryfit technology. Typical applications are weekend and holiday houses without mains supply, street solar stations, information signs, parking meters, wireless emergency phone boxes and also other safety equipment power supplies.

	
Nominal capacity 6.60 – 230 Ah	Block battery
	
Grid plate	800 cycles acc. to IEC 896-2
	
Recyclable	Valve regulated lead- acid batteries
	
Proof against deep discharge	Maintenance-free (no topping-up)

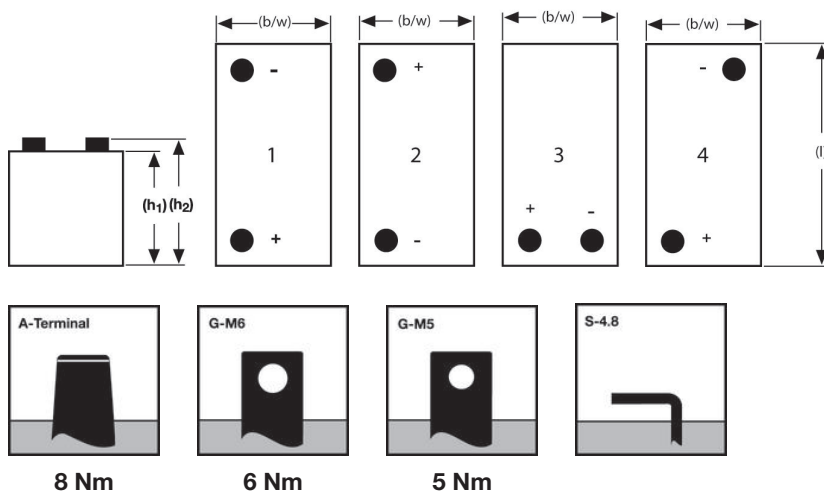


Technical characteristics and data

Type	Part number	Nom. voltage V	Nominal capacity C_{100} 1.80 Vpc Ah	Discharge current I_{100} A	Length (l) max. mm	Width (b/w) max. mm	Height up to top of cover (h1) max. mm	Height incl. connectors (h2) max. mm	Weight approx. kg	Terminal	Terminal position
S12/6.6 S	NGSO1206D6HS0SA	12	6.60	0.06	152	65.5	94.5	98.4	2.60	S-4.8	3
S12/17 G5	NGSO120017HS0BA	12	17.0	0.17	181	76.0	-	167	6.10	G-M5	1
S12/27 G5	NGSO120027HS0BA	12	27.0	0.27	167	176	-	126	9.60	G-M5	1
S12/32 G6	NGSO120032HS0BA	12	32.0	0.32	197	132	160	184	11.1	G-M6	2
S12/41 A	NGSO120041HSOCA	12	41.0	0.41	210	175	-	175	14.6	A-Terminal	1
S12/60 A	NGSO120060HSOCA	12	60.0	0.60	261	136	208	230	19.0	A-Terminal	1
S12/85 A	NGSO120085HSOCA	12	85.0	0.85	353	175	-	190	26.8	A-Terminal	1
S12/90 A	NGSO120090HSOCA	12	90.0	0.90	330	171	213	236	30.0	A-Terminal	2
S12/130 A	NGSO120130HSOCA	12	130	1.30	286	269	208	230	39.0	A-Terminal	4
S12/230 A	NGSO120230HSOCA	12	230	2.30	518	274	216	238	67.0	A-Terminal	3

Capacities $C_1 - C_{100}$ (20 °C)					
Type	C_1 1.70 Vpc	C_5 1.70 Vpc	C_{10} 1.70 Vpc	C_{20} 1.75 Vpc	C_{100} 1.80 Vpc
S12/6.6 S	2.90	4.60	5.10	5.70	6.60
S12/17 G5	9.30	12.6	14.3	15.0	17.0
S12/27 G5	15.0	22.1	23.5	24.0	27.0
S12/32 G6	16.9	24.4	27.0	28.0	32.0
S12/41 A	21.0	30.6	34.0	38.0	41.0
S12/60 A	30.0	42.5	47.5	50.0	60.0
S12/85 A	55.0	68.5	74.0	76.0	85.0
S12/90 A	50.5	72.0	78.0	84.0	90.0
S12/130 A	66.0	93.5	104	110	130
S12/230 A	120	170	190	200	230









Drawings with terminal position, terminal and torque



Not to scale!

Safe power supply for medium performance.

The Sonnenschein SOLAR BLOCK battery range is very powerful and reliable in rough application conditions. As well as for use in private areas like holiday and weekend houses with more consumer terminals, this range is the ideal energy source for medium industrial solar systems, small solar and wind powerstations, offshore buoys, yachts and measuring stations as well as for other safety equipment power supplies.

	
Nominal capacity 60.0 – 330 Ah	Block battery
	
Grid plate	1200 cycles acc. to IEC 896-2
	
Recyclable	Valve regulated lead-acid batteries
	
Proof against deep discharge	Maintenance-free (no topping-up)

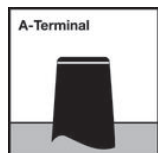
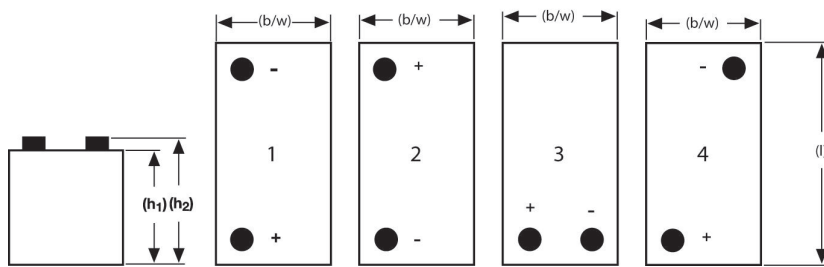


Technical characteristics and data

Type	Part number	Nom. voltage	Nominal capacity	Discharge current	Length (l)	Width (b/w)	Height up to top of cover (h1)	Height incl. connectors (h2)	Weight approx. kg	Terminal	Terminal position
		V	C ₁₀₀ 1.80 Vpc Ah	I ₁₀₀ A	max. mm	max. mm	max. mm	max. mm			
SB 6/200 A	NGSB060200HSOCA	6	200	2.00	246	192	254	275	29.0	A-Terminal	4
SB 6/330 A	NGSB060330HSOCA	6	330	3.30	312	182	337	359	47.0	A-Terminal	4
SB12/60 A	NGSB120060HSOCA	12	60.0	0.60	278	175	-	190	19.0	A-Terminal	1
SB12/75 A	NGSB120075HSOCA	12	75.0	0.75	330	171	214	236	26.5	A-Terminal	2
SB12/100 A	NGSB120100HSOCA	12	100	1.00	513	189	195	223	36.5	A-Terminal	3
SB12/130 A	NGSB120130HSOCA	12	130	1.30	513	223	195	223	45.5	A-Terminal	3
SB12/185 A	NGSB120185HSOCA	12	185	1.85	518	274	216	238	62.5	A-Terminal	3

Capacities C ₁ – C ₁₀₀ (20 °C)					
Type	C ₁ 1.70 Vpc	C ₅ 1.70 Vpc	C ₁₀ 1.70 Vpc	C ₂₀ 1.75 Vpc	C ₁₀₀ 1.80 Vpc
SB 6/200 A	104	153	162	180	200
SB 6/330 A	150	235	260	280	330
SB12/60 A	34.0	45.0	52.0	56.0	60.0
SB12/75 A	48.0	60.0	66.0	70.0	75.0
SB12/100 A	57.0	84.0	89.0	90.0	100
SB12/130 A	78.0	101	105	116	130
SB12/185 A	103	150	155	165	185

Drawings with terminal position, terminal and torque











8 Nm

Not to scale!

Sonnenschein A600 SOLAR batteries are developed for medium to large solar powered applications. The recyclability and long storage life without recharge makes this environmentally friendly solar battery system absolutely recommendable for various requirement profiles. Typical applications for these maintenance free VRLA-batteries with successful dryfit technology, are solar and wind power stations, power distribution companies, telecommunications, railways and many other safety equipment power supplies.

The mounting in vertical as well as horizontal position is possible.



			
Nominal capacity 294 – 3919 Ah	Single cell	Tubular plate	1600 cycles acc. to IEC 896-2
			
Recyclable	Valve regulated lead-acid batteries	Proof against deep discharge	Maintenance- free (no topping- up)

A600 SOLAR series



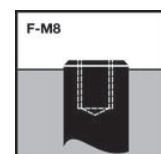
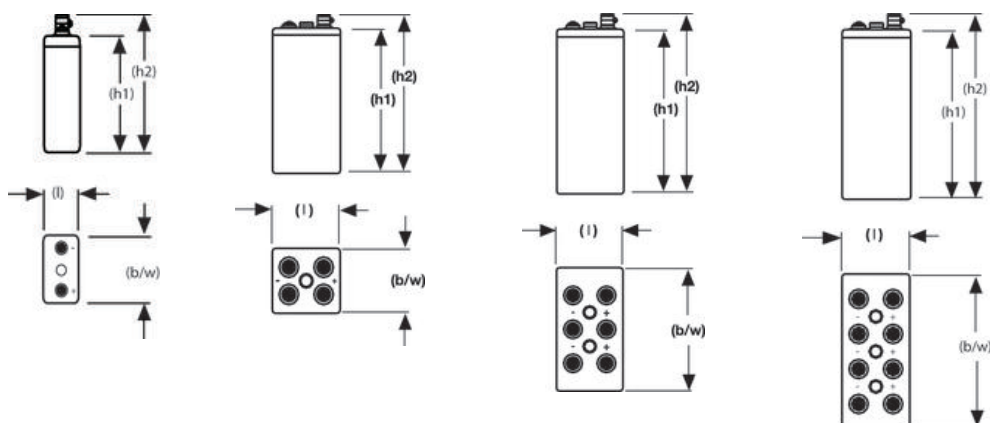
Technical characteristics and data

Type	Part number	Nom. voltage	Nominal capacity	Discharge current	Length (l) max. mm	Width (b/w) max. mm	Height up to top of cover (h1) max. mm	Height incl. connectors (h2) max. mm	Weight approx. kg	Terminal	Pole pairs
		V	C_{120} 1.85 Vpc Ah	I_{120} A							
4 OPzV 240	NGS6020240HS0FA	2	294	2.45	105	208	357	399	19.0	F-M8	1
5 OPzV 300	NGS6020300HS0FA	2	367	3.05	126	208	357	399	23.0	F-M8	1
6 OPzV 360	NGS6020360HS0FA	2	440	3.66	147	208	357	399	27.0	F-M8	1
5 OPzV 400	NGS6020400HS0FA	2	519	4.32	126	208	473	515	30.0	F-M8	1
6 OPzV 500	NGS6020500HS0FA	2	623	5.19	147	208	473	515	35.0	F-M8	1
7 OPzV 600	NGS6020600HS0FA	2	727	6.05	168	208	473	515	39.0	F-M8	1
6 OPzV 720	NGS6020720HS0FA	2	848	7.06	147	208	648	690	49.0	F-M8	1
8 OPzV 960	NGS6020960HS0FA	2	1131	9.42	212	193	648	690	66.0	F-M8	2
10 OPzV 1200	NGS6021200HS0FA	2	1413	11.7	212	235	648	690	80.0	F-M8	2
12 OPzV 1400	NGS6021400HS0FA	2	1695	14.1	212	277	648	690	95.0	F-M8	2
12 OPzV 1700	NGS6021700HS0FA	2	1959	16.3	212	277	798	840	117	F-M8	2
16 OPzV 2300	NGS6022300HS0FA	2	2613	21.7	216	400	775	816	160	F-M8	3
20 OPzV 2900	NGS6022900HS0FA	2	3266	27.2	214	489	774	816	198	F-M8	4
24 OPzV 3500	NGS6023500HS0FA	2	3919	32.6	214	578	774	816	238	F-M8	4

Capacities in Ah $C_1 - C_{120}$ (20 °C)

Type	C_1 1.67 Vpc	C_3 1.75 Vpc	C_5 1.77 Vpc	C_{10} 1.80 Vpc	C_{100} 1.85 Vpc	C_{120} 1.85 Vpc
4 OPzV 240	123	167	193	218	286	294
5 OPzV 300	154	209	241	272	357	367
6 OPzV 360	185	251	290	326	429	440
5 OPzV 400	229	307	342	380	505	519
6 OPzV 500	275	369	410	456	606	623
7 OPzV 600	321	431	479	532	707	727
6 OPzV 720	367	513	626	681	829	848
8 OPzV 960	489	684	834	908	1105	1131
10 OPzV 1200	612	855	1043	1135	1382	1413
12 OPzV 1400	734	1026	1252	1363	1658	1695
12 OPzV 1700	785	1161	1336	1519	1911	1959
16 OPzV 2300	1047	1548	1782	2025	2547	2613
20 OPzV 2900	1309	1935	2228	2532	3184	3266
24 OPzV 3500	1571	2322	2673	3038	3821	3919

Drawings with terminal position, terminal and torque



20 Nm

Not to scale!

GNB[®] INDUSTRIAL POWER



Exide Technologies, with operations in more than 80 countries, is one of the world's largest producers and recyclers of lead-acid batteries. Exide provides a comprehensive and customized range of stored electrical energy solutions.

Based on over 100 years of experience in the development of innovative technologies, Exide is an esteemed partner of OEMs and serves the spare parts market for industrial and transportation applications. The GNB Industrial Power business unit offers an extensive range of storage products and services, including solutions for

telecommunications systems, railway applications, mining, photovoltaic (solar energy), uninterruptible power supply (UPS), electrical power generation and distribution, fork lifts and electric vehicles.

Exide Technologies takes pride in its commitment to a better environment. Its Total Battery Management programme, (an integrated approach to manufacturing, distributing and recycling of lead-acid batteries), has been developed to ensure a safe and responsible life cycle for all of its products.