

Applications and Key Benefits

- + Solar 2V cells
 - up to 3,800 Ah real capacity at C120 1.85 VPC
- + Designed for regular and long deep discharge
 - Ideal for:
 - Renewable energy islands (Solar / Wind)
 - Off-grid applications: BTS, mobile phone stations, signaling, lighting
 - High capacity applications in areas with unstable grid and unreliable power supply
- + Excellent cycling also in state of partial discharge
- + > 1,500 cycles at 20°C / 60% DoD
 - > 5,000 cycles at 20°C / 20% DoD
- + OPzV technology, with tubular positive plates and electrolyte immobilized in gel
- + Dimensions according to DIN 40742 OPzV cells
- + Suitable for use at elevated temperature
- + Optimized for deep DOD cycling and deep discharge recovery DIN 43539T5
- + 18 years design life under float condition
- + Minimal gassing and maintenance free (no topping-up)
- + 100% Recyclable

Applicable Standards

- IEC 61427 - photovoltaic energy systems
- DIN 40742 - specification OPzV cells
- DIN 43539T5 - deep DOD cycling and deep discharge recovery
- IEC 60896 Part 21 - VRLA methods of testing
- IEC 60896 Part 22 - VRLA requirements
- Eurobat "Long Life" - 12 years and longer

FIAMM Manufacturing

- ISO 9001 Quality Management System
- ISO 14001 Environmental Management System
- OHSAS 18001 Workplace Safety and Health

Technical Features

- Tubular positive plates, pressure cast from high tin / low calcium alloy
- Electrolyte immobilized in gel structure
- Highly porous gauntlets retain the active material
- Pasted negative plates designed to have service lives consistent with the positive plates
- Separators with extremely high porosity and low internal resistance
- Standard ABS plastics (Optional flame retardant plastics ABS IEC 707 FV0 and UL 94 V0 with LOI greater than 28%)
- Container and lid designed for unsurpassed mechanical strength made of thick walled plastics
- Threaded female M10 terminal posts guarantee highest conductivity, maximum torque retention and easy installation
- High integrity post seal design to prevent electrolyte leakage and terminal corrosion
- Flame arrestors prevent sparks or flames from entering the battery
- Cells equipped with one-way safety valves to allow excess gas to escape when overcharging
- < 2% self-discharge per month at 20°C allows 6 months shelf life
- Installation in vertical or horizontal position
- Flexible, fully insulated cable connectors with insulated screw with probe hole on the top for electrical measurement



ENDURLITE

SMG Solar OPzV



FIAMM SMG Solar OPzV range

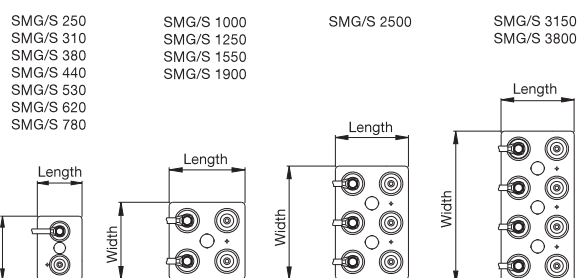
CELL TYPE	CAPACITY (Ah) at 20°C	CAPACITY (Ah) at 20°C	SHORT CIRCUIT CURRENT (A)	INTERNAL RESISTANCE (mohm)	WEIGHT (kg)	DIMENSIONS (mm)			TERMINALS
	120 hrs to 1.85 VPC	10 hrs to 1.80 VPC	IEC 60896-21	IEC 60896-21		Length	Width	Height	+/-
SMG/S 250	250	205	2300	0.89	17	103	206	388	1 / 1
SMG/S 310	310	255	2830	0.71	21	124	206	388	1 / 1
SMG/S 380	380	305	3660	0.55	24	145	206	388	1 / 1
SMG/S 440	440	355	3770	0.53	27	124	206	504	1 / 1
SMG/S 530	530	425	4080	0.50	32	145	206	504	1 / 1
SMG/S 620	620	500	4190	0.49	36	166	206	504	1 / 1
SMG/S 780	780	610	4400	0.46	44	145	206	679	1 / 1
SMG/S 1000	1000	815	5340	0.38	60	210	191	679	2 / 2
SMG/S 1250	1250	1020	6600	0.31	73	210	233	679	2 / 2
SMG/S 1550	1550	1220	7960	0.26	85	210	275	679	2 / 2
SMG/S 1900	1900	1530	9950	0.206	104	210	275	829	2 / 2
SMG/S 2500	2500	2040	12570	0.155	138	212	397	805	3 / 3
SMG/S 3150	3150	2550	15710	0.123	173	212	487	805	4 / 4
SMG/S 3800	3800	3060	18850	0.103	208	212	576	805	4 / 4

Note : dimensions may have a natural tolerance of ± 2 mm.

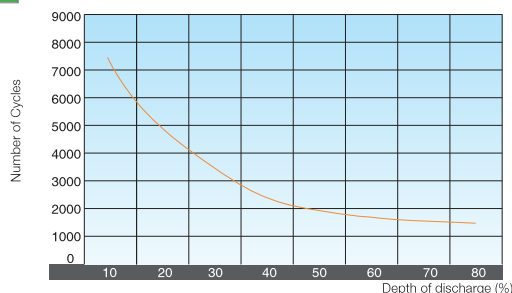
Electrical Characteristics

- ✦ FLOAT VOLTAGE CHARGE AT 20 - 25 °C : Standby use 2.23 ~ 2.25 V/cell
- ✦ BOOST CHARGE : 2.35 V/cell
- ✦ MAXIMUM CHARGE CURRENT : 0.25 C₁₀ A (i.e.:for a 100Ah cell maximum charge current is 25 Amps)
- ✦ FLOAT VOLTAGE TEMPERATURE COMPENSATION : - 2.5mV/°C/cell
- ✦ SELF-DISCHARGE AT 20 °C : < 2% / month
- ✦ WARNING: in order for the warranty to be valid in all critical , frequent discharge and hybrid applications, please coordinate with Fiamm Group to clarify required operating and charging settings

Dimensions



Lifetime in cyclic use at 20°C



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