

# FIAMM

Industrial Batteries

ENDURLITE

## SMG Solar OPzV



### Applications and Key Benefits

- + Solar 2V cells
  - up to 3.900 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 discharge recovery DIN 43539T5
- + 18 years design life under float condition
- + Minimal gassing and maintenance free (no topping-up)
- + Completely Recyclable

### Applicable Standards

- IEC 61427 - photovoltaic energy systems
- DIN 40742 - specification OPzV cells
- DIN 43539T5 - deep discharge
- 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

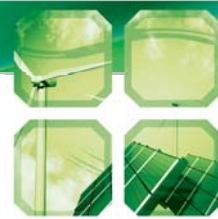
### Technical Features

- 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 cell
- 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 voltage measurement



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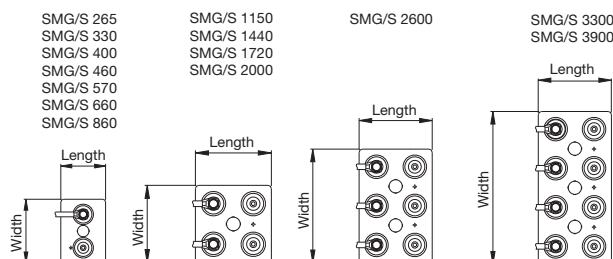
## FIAMM SMG Solar OPzV range

CELL TYPE	CAPACITY (Ah) at 20°C	SHORT CIRCUIT CURRENT (A)	INTERNAL RESISTANCE (mohm)	WEIGHT (kg)	DIMENSIONS (mm)			TERMINALS
	120 hrs to 1.85 VPC	IEC 60896 21-22	IEC 60896 21-22		Length	Width	Height*	+/-
SMG/S 265	265	2800	0.714	20.4	103	206	406	1 / 1
SMG/S 330	330	3650	0.571	23.5	124	206	406	1 / 1
SMG/S 400	400	4250	0.476	27.5	145	206	406	1 / 1
SMG/S 460	460	3560	0.572	29.6	124	206	523	1 / 1
SMG/S 570	570	4200	0.476	35.7	145	206	523	1 / 1
SMG/S 660	660	4950	0.409	40	166	206	523	1 / 1
SMG/S 860	860	6200	0.322	51	145	206	698	1 / 1
SMG/S 1150	1150	7100	0.285	68	210	191	698	2 / 2
SMG/S 1440	1440	8800	0.228	84	210	233	698	2 / 2
SMG/S 1720	1720	10500	0.190	98	210	275	698	2 / 2
SMG/S 2000	2000	11700	0.170	118	210	275	848	2 / 2
SMG/S 2600	2600	15700	0.128	164	212	397	824	3 / 3
SMG/S 3300	3300	20000	0.102	201	212	487	824	4 / 4
SMG/S 3900	3900	23500	0.086	235	212	576	824	4 / 4

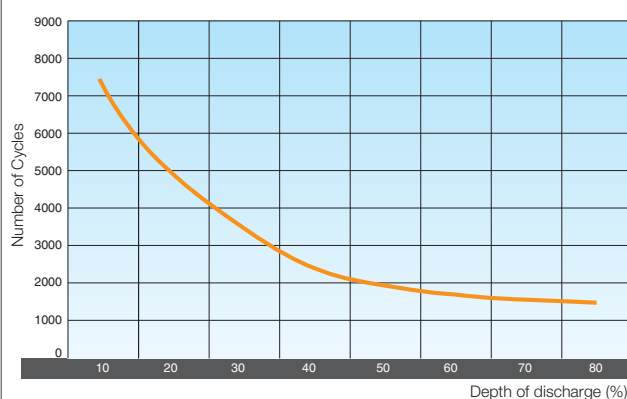
\* Total height including standard connection screw

### Electrical Characteristics

- + NOMINAL VOLTAGE: 2 V
- + FLOAT VOLTAGE AT 20°C: 2.23 V/cell
- + BOOST RECHARGE: maximum voltage of 2.4 V/cell with the maximum current of  $0.25 \times C_{10}$  (A)



### Lifetime in cyclic use at 20°C



FIAMM reserves the right to change or revise without notice any information or detail given in this publication  
SMG Solar OPzV\_EMEA\_2011\_11\_24

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