SOLAR BATTERIES
SMG

ENDURLITE

SMG Solar OPzV

INDUSTRIAL BATTERIES

APPLICATIONS AND KEY BENEFITS

- Solar 2V cells
  up to 3900 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, signalling, lighting
  - High capacity applications in areas with unstable grid and unreliable power supply
- Excellent cycling also in state of partial discharge.
- > 1500 cycles at 20°C / 60% DoD
  > 5000 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.

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.

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
- ISO 45001 - Occupational Health and Safety Management System

MAIN APPLICATIONS


RENEWABLE ENERGY


PHONE STATIONS


BTS SYSTEMS


LIGHTING


SIGNALING SYSTEMS

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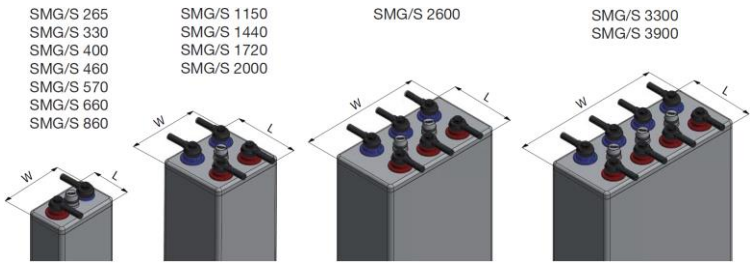
ELECTRICAL CHARACTERISTICS

- **Nominal voltage:** 2 V/cell
- **Float voltage charge at 20°C:** 2.25 V/cell
- **Boost charge:** 2.4 V/cell

TECHNICAL CHARACTERISTICS

FIAMM SMG Solar OPzV								
Battery Type	Capacity (Ah) at 20°C 120 hrs to 1,85 VPC	Short Circuit Current (A)	Internal Resistance (m0hm)	Weight (kg)	Dimensions (mm)			Terminals
		IEC 60896-21-22	IEC 60896-21-22		Length	Width	Height	+ / -
SMG/S 265	265	2800	0,714	19,3	103	206	407	1 / 1
SMG/S 330	330	3650	0,571	23,3	124	206	407	1 / 1
SMG/S 400	400	4250	0,476	27,0	145	206	407	1 / 1
SMG/S 460	460	3560	0,572	30,4	124	206	523	1 / 1
SMG/S 570	570	4200	0,476	33,8	145	206	523	1 / 1
SMG/S 660	660	4950	0,409	39,6	166	206	523	1 / 1
SMG/S 860	860	6200	0,322	49,2	145	206	698	1 / 1
SMG/S 1150	1150	7100	0,285	65,6	210	191	700	2 / 2
SMG/S 1440	1440	8800	0,228	81,6	210	233	700	2 / 2
SMG/S 1720	1720	10500	0,190	96,5	210	275	700	2 / 2
SMG/S 2000	2000	11700	0,170	113	210	275	849	2 / 2
SMG/S 2330	2330	13850	0.135	137	212	399	826	3 / 3
SMG/S 2600	2600	15700	0,128	153	212	399	826	3 / 3
SMG/S 2940	2940	17900	0,108	174	212	487	826	4 / 4
SMG/S 3300	3300	20000	0,102	192	212	487	826	4 / 4
SMG/S 3580	3580	23000	0,100	211	212	576	826	4 / 4
SMG/S 3900	3900	23500	0,086	229	212	576	826	4 / 4
SMG/S 4240	4240	25050	0,078	244	212	576	826	4 / 4

Technical Drawings - Top View



Lifetime in cyclic use at 20°C