



ENDURLITE

LM Solar OPzS

INDUSTRIAL BATTERIES

APPLICATIONS AND KEY BENEFITS

- Solar 2V cells up to 5000 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, drinking water supply systems and other
 - 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.
- OPzS technology, with tubular positive plates and free liquid electrolyte.
- Allows use with electrolyte recirculation.
- Dimensions according to DIN 40736 OPzS cells.
- Suitable for use at elevated temperature.
- Optimized for deep discharge recovery DIN 43539T5.
- 20 years design life under float condition.
- Also available in dry charged version.
- 100% Recyclable.

TECHNICAL FEATURES

- Tubular positive plates with special low antimony lead alloy reduces loss of water (3-year topping-up intervals on float condition).
- Electrolyte: high purity sulphuric acid solution with 1.24 specific gravity at 20°C.
- Additional electrolyte to reduce topping-up.
- Pasted negative grid plates designed to have service lives consistent with the positive plates.
- Separators with extremely high porosity and low internal resistance.
- Container in acid resistant SAN, designed for unsurpassed mechanical strength.
- Lid in standard ABS.

MAIN APPLICATIONS



RENEWABLE ENERGY



PHONE STATIONS



BTS SYSTEMS



WATER SYSTEMS



SIGNALING SYSTEMS

- 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.
- Ceramic plugs filter electrolyte from escaping gasses.
- Flame arrestors prevent sparks or flames from entering the battery.
- < 3% self-discharge per month at 20°C allows 6 months shelf life.
- Installation in vertical position.
- Flexible, fully insulated cable connectors with insulated screw with probe hole on the top for electrical measurement.

APPLICABLE STANDARDS

- IEC 61427 - photovoltaic energy systems
- DIN 40736 - specification OPzS cells
- DIN 43539T5 - deep discharge
- DIN 40740 - electrolyte level indicator
- IEC 60896 Part 11 - vented types requirements & tests

FIAMM MANUFACTURING

- ISO 9001 - Quality Management System
- ISO 14001 - Environmental Management System
- ISO 45001 - Occupational Health and Safety Management System



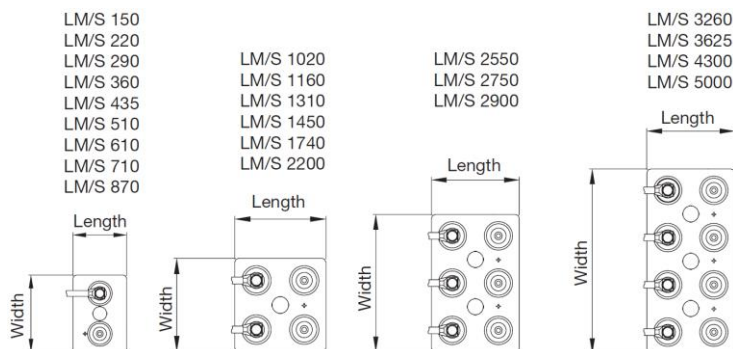
ELECTRICAL CHARACTERISTICS

- Nominal voltage: 2 V/cell
- Float voltage charge at 20°C: 2.23 V/cell
- Boost charge: 2.4 V/cell

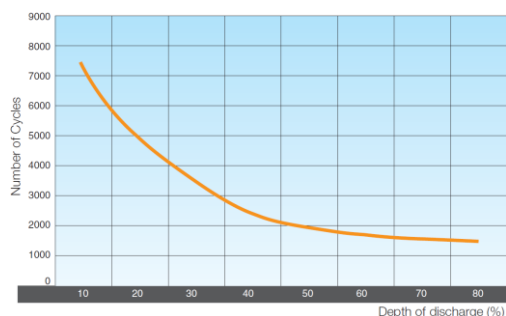
TECHNICAL CHARACTERISTICS

FIAMM LM Solar OPzS									
Battery Type	Capacity (Ah) at 20°C 120 hrs to 1,85 VPC	Short Circuit Current (A) IEC 60896-11	Internal Resistance (mohm) IEC 60896-11	Weight with electrolyte (kg)	Electrolyte (liters)	Dimensions			Terminals (+/-)
						Length	Width	Height	
LM/S 150	150	1220	1,860	14,3	4,4	103	206	420	1/1
LM/S 220	220	1840	1,240	16,0	4,0	103	206	420	1/1
LM/S 290	290	2330	0,857	17,7	3,8	103	206	420	1/1
LM/S 360	360	2650	0,745	21,5	5,0	124	206	420	1/1
LM/S 435	435	3170	0,620	25,2	5,7	145	206	420	1/1
LM/S 510	510	3090	0,641	28,8	6,6	124	206	536	1/1
LM/S 610	610	3700	0,534	33,2	7,5	145	206	536	1/1
LM/S 710	710	4320	0,458	38,2	8,7	166	206	536	1/1
LM/S 870	870	4470	0,456	45,5	12,8	145	206	711	1/1
LM/S 1020	1020	5210	0,391	59,7	15,7	210	191	711	2/2
LM/S 1160	1160	5980	0,342	63,1	13,5	210	191	711	2/2
LM/S 1310	1310	6700	0,304	72,6	23,1	210	233	711	2/2
LM/S 1450	1450	7450	0,273	76,0	18,5	210	233	711	2/2
LM/S 1740	1740	8940	0,227	90,5	23,2	210	275	711	2/2
LM/S 2200	2200	10000	0,204	111	27,7	210	275	861	2/2
LM/S 2550	2550	11660	0,174	144	36,5	214	399	837	3/3
LM/S 2750	2750	12490	0,163	149	35	214	399	837	3/3
LM/S 2900	2900	13330	0,153	153	40,2	214	399	837	3/3
LM/S 3260	3260	14990	0,136	184	45,8	212	487	837	4/4
LM/S 3625	3625	16660	0,122	190	42,4	212	487	837	4/4
LM/S 4300	4300	19990	0,102	225	55,3	212	576	837	4/4
LM/S 5000	5000	23320	0,088	245	58	212	576	837	4/4

Dimensions



Lifetime in cyclic use at 20°C



A2B, s.r.o. reserves the right to change any specifications without prior notice. (74-000142-02)