



# SMG 12V cells

## Applications and Key Benefits

- + Designed for front terminal Telecom application ideal for:
  - off-grid and hybrid TLC installations
  - use in areas with unreliable power supply
  - front terminal compact battery layout
- + Tubular positive plates
- + Electrolyte immobilized in gel
- + Excellent cycling performance, also at elevated temperature
- + Excellent for deep DOD cycling and deep discharge recovery (DIN43539T5)
- + 15 years design life
- + Front terminal design reduces installation time and facilitates maintenance
- + For 23 inch power racks / cabinets
- + Minimal gassing and fit for remote venting
- + Non-spillable maintenance free without topping-up
- + Non-hazardous for air/sea/rail/road transportation
- + 100% Recyclable



## Applicable Standards

- 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
- UL Recognized

## 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
- ABS IEC 707 FV0 and UL 94 V0 flame retardant plastics (LOI greater than 28%)
- Container and lid designed for unsurpassed mechanical strength made of thick walled plastics
- Threaded female M8 terminal posts guarantee highest conductivity, maximum torque retention and easy installation
- Front terminals for reduced headspace, higher energy density and compact battery layout
- 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 that open at 5 PSI and close at 3 PSI to allow excess gas to escape when overcharging
- < 2% self-discharge per month at 20°C allows 6 months shelf life
- Supplied with rigid inter-cell connectors and connector cover
- Remote venting system available for applications which require limited gassing to be vented externally

# SMG 12V blocs

## FIAMM SMG range

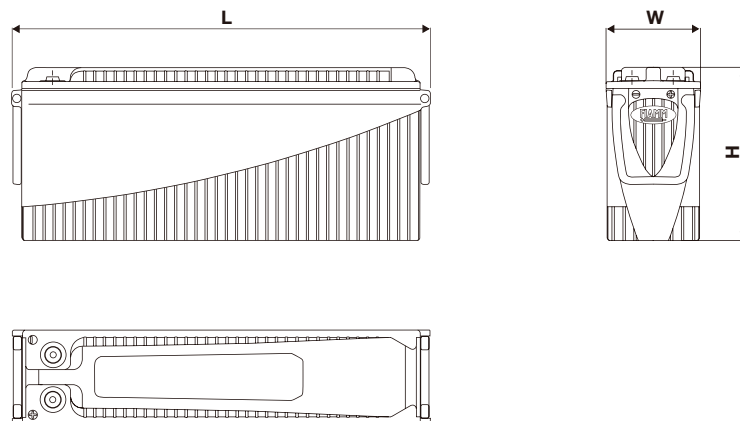
BATTERY TYPE	NOMINAL VOLTAGE (V)	CAPACITY (AH) Ah at 20°C	SHORT CIRCUIT CURRENT (A)	INTERNAL RESISTANCE (mohm)	DIMENSIONS (mm)			WEIGHT (kg)	TERMINAL TYPE
		10 hrs to 1.80 VPC	IEC 60896-21	IEC 60896-21	Length	Width	Height		
12SMG100	12	100	1500	7.8	560	126	270	44	Female M8
12SMG130	12	130	1470	8.6	560	126	320	54	Female M8

Note: dimensions may have a natural tolerance of  $\pm 2$ mm

## Electrical Characteristics

- + FLOAT VOLTAGE CHARGE AT 20-25°C: Standby use 13.5-13.62 V/bloc (2.25-2.27 V/cell)
- + BOOST CHARGE: 14.1 V/bloc (2.35 V/cell)
- + MAXIMUM CHARGE CURRENT: 0.25 C10 A (i.e. for a 100Ah bloc maximum charge current is 25 Amps)
- + FLOAT VOLTAGE TEMPERATURE COMPENSATION: -15 mV/°C/bloc
- + 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



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FIAMM Energy Technology  
(Wuhan) Co. Ltd.  
Reserve Power Solutions

www.fiamm.com  
email: info.standby.asia@fiamm.com

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