The positive tubular grid is composed of a special alloy (Pb-Sb) which is die-cast to guarantee high corrosion resistance and low water consumption (1 topping up in 3 years in float conditions).

Electrolyte: sulphuric acid electrolyte with specific gravity of 1.24kg/l at 20°C.

Separators have high porosity and provide very low internal resistance.

Robust design thanks to high mechanical polymers properties; box made of SAN and with an ABS lid.

The vent plug is made of porous flameproof material for a superior safety.

A long shelf life of up to six months is possible without recharge (<2% discharge per month).

The metallic threaded insert on terminals ensures the highest conductivity and provides maximum torque retention and easy installation.

Flexible connections ensure a safe link between terminals.

The connecting bolt is fully insulated but with probe hole on the top to grant electrical measurements.

---

**SPECIFICATIONS**

**MAIN APPLICATIONS:**

- Telecommunication
- Industrial UPS
- Utilities and Industry
- Railways
- Oil & Gas

---
The unique FIAMM terminal design permits pillar growth during cell life without leakage. This feature avoids mechanical stress on the lid of the cell.

The LM range has a design life is 20 years due to high reliability and components manufacture process. All LM models are available in a dry charge version.

<table>
<thead>
<tr>
<th>Battery Type</th>
<th>Reference</th>
<th>Nominal Capacity (Ah)</th>
<th>Short Circuit Current (A)</th>
<th>Internal Resistance (mOhm)</th>
<th>Nominal Dimension (mm)</th>
<th>Electrolyte Quantity (liters)</th>
<th>Typical Weight (with electrolyte) (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LM 100</td>
<td>2 OPzS 100</td>
<td>108</td>
<td>1250</td>
<td>1.824</td>
<td>103  206  420</td>
<td>4.2</td>
<td>13.9</td>
</tr>
<tr>
<td>LM 150</td>
<td>3 OPzS 150</td>
<td>162</td>
<td>1875</td>
<td>1.216</td>
<td>103  206  420</td>
<td>3.8</td>
<td>16.1</td>
</tr>
<tr>
<td>LM 200</td>
<td>4 OPzS 200</td>
<td>216</td>
<td>2380</td>
<td>0.840</td>
<td>103  206  420</td>
<td>3.6</td>
<td>17.4</td>
</tr>
<tr>
<td>LM 250</td>
<td>5 OPzS 250</td>
<td>270</td>
<td>2700</td>
<td>0.730</td>
<td>124  206  420</td>
<td>4.7</td>
<td>21.4</td>
</tr>
<tr>
<td>LM 300</td>
<td>6 OPzS 300</td>
<td>324</td>
<td>3240</td>
<td>0.608</td>
<td>145  206  420</td>
<td>5.4</td>
<td>24.8</td>
</tr>
<tr>
<td>LM 350</td>
<td>5 OPzS 350</td>
<td>390</td>
<td>3150</td>
<td>0.628</td>
<td>124  206  536</td>
<td>6.3</td>
<td>28.4</td>
</tr>
<tr>
<td>LM 420</td>
<td>6 OPzS 420</td>
<td>468</td>
<td>3780</td>
<td>0.524</td>
<td>145  206  536</td>
<td>7.2</td>
<td>32.7</td>
</tr>
<tr>
<td>LM 490</td>
<td>7 OPzS 490</td>
<td>546</td>
<td>4410</td>
<td>0.449</td>
<td>166  206  536</td>
<td>8.3</td>
<td>37.6</td>
</tr>
<tr>
<td>LM 600</td>
<td>6 OPzS 600</td>
<td>630</td>
<td>4560</td>
<td>0.447</td>
<td>145  206  711</td>
<td>12.2</td>
<td>46.5</td>
</tr>
<tr>
<td>LM 700</td>
<td>7 OPzS 700</td>
<td>735</td>
<td>5320</td>
<td>0.383</td>
<td>210  191  711</td>
<td>15.0</td>
<td>58.8</td>
</tr>
<tr>
<td>LM 800</td>
<td>8 OPzS 800</td>
<td>840</td>
<td>6100</td>
<td>0.335</td>
<td>210  191  711</td>
<td>12.9</td>
<td>62.2</td>
</tr>
<tr>
<td>LM 900</td>
<td>9 OPzS 900</td>
<td>945</td>
<td>6840</td>
<td>0.296</td>
<td>210  233  711</td>
<td>22.0</td>
<td>71.5</td>
</tr>
<tr>
<td>LM 1000</td>
<td>10 OPzS 1000</td>
<td>1050</td>
<td>7600</td>
<td>0.268</td>
<td>210  233  711</td>
<td>17.7</td>
<td>74.9</td>
</tr>
<tr>
<td>LM 1200</td>
<td>12 OPzS 1200</td>
<td>1260</td>
<td>9120</td>
<td>0.223</td>
<td>210  275  711</td>
<td>22.1</td>
<td>89.2</td>
</tr>
<tr>
<td>LM 1500</td>
<td>12 OPzS 1500</td>
<td>1570</td>
<td>10200</td>
<td>0.200</td>
<td>210  275  861</td>
<td>26.7</td>
<td>114</td>
</tr>
<tr>
<td>LM 1750</td>
<td>14 OPzS 1750</td>
<td>1840</td>
<td>11900</td>
<td>0.171</td>
<td>212  399  837</td>
<td>35.5</td>
<td>147</td>
</tr>
<tr>
<td>LM 1875</td>
<td>15 OPzS 1875</td>
<td>1970</td>
<td>12750</td>
<td>0.160</td>
<td>212  399  837</td>
<td>34.0</td>
<td>150</td>
</tr>
<tr>
<td>LM 2000</td>
<td>16 OPzS 2000</td>
<td>2100</td>
<td>13600</td>
<td>0.150</td>
<td>212  399  837</td>
<td>38.3</td>
<td>155</td>
</tr>
<tr>
<td>LM 2250</td>
<td>18 OPzS 2250</td>
<td>2360</td>
<td>15300</td>
<td>0.133</td>
<td>212  487  837</td>
<td>43.6</td>
<td>181</td>
</tr>
<tr>
<td>LM 2500</td>
<td>20 OPzS 2500</td>
<td>2620</td>
<td>17000</td>
<td>0.120</td>
<td>212  487  837</td>
<td>48.4</td>
<td>190</td>
</tr>
<tr>
<td>LM 3000</td>
<td>24 OPzS 3000</td>
<td>3150</td>
<td>20400</td>
<td>0.100</td>
<td>212  576  837</td>
<td>52.6</td>
<td>222</td>
</tr>
<tr>
<td>LM 3500</td>
<td>28 OPzS 3500</td>
<td>3500</td>
<td>23800</td>
<td>0.086</td>
<td>212  576  837</td>
<td>55.2</td>
<td>248</td>
</tr>
</tbody>
</table>
ELECTRICAL CHARACTERISTICS

Float Voltage: 2.23 V/cell at 20°C  
Boost Voltage: 2.40 V/cell  
Float Voltage Compensation with Temperature: -2.5 mV/cell/°C  
Self-Discharge at 20°C: <2%/month

STANDARDS

DIN 40736 – specification OPzS cell  
DIN 43539T5 – deep discharge  
DIN 40740 – electrolyte level indicator  
IEC 60896 Part 11 – vented types requirements & tests

CERTIFICATIONS

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

ACCESSORIES

Recombination plug  
Filtering plugs to DIN standard  
Racks for battery installation (standard and anti-seismic)  
Monitoring system

DISCHARGE CURVES at different current / final voltage (at 20°C)

The above discharge curves are typical. For more detailed information please see the specific product sheets.

TYPICAL CHARGE CURVES

Battery Voltage and Charge Time for Standby Use (at 20°C)

STORAGE

Capacity loss during storage at various temperatures

The battery can be used without refreshing charge.  
Refreshing charge at 2.4 Vpc for 24 hours (at 20-25°C) must be applied as soon as possible.  
Refreshing charge of 2.4 Vpc may be insufficient to recover the battery capacity. It is important to avoid this area <80%.

Headquarters  
FIAMM Energy Technology S.p.A.  
Viale Europa, 75  
36075 Montecchio Maggiore (VI) - Italy  
Tel. +39 0444 709311  
Fax +39 0444 694178

A Hitachi Group Company