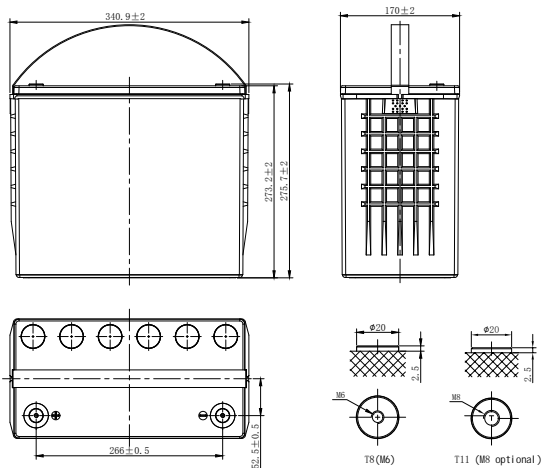


# PLX-PURE LEAD HIGH RATE

## PLX12-540 (12V540W)



### CHARACTERISTICS

| Item                          | Specifications                |   |
|-------------------------------|-------------------------------|---|
| Rated Voltage                 | 12V                           |   |
| Nominal Rate (25°C)           | $W_{15}, 1.67V/cell$          | 540W/cell   |
| Nominal Capacity (25°C)       | $C_{10}, 1.80V/cell$          | 135Ah   |
| Dimension                     | Length                        | 340.9mm(13.4inches)   |
|                               | Width                         | 170mm(6.69inches)   |
|                               | Container Height              | 273.2mm(10.8inches)   |
|                               | Total Height                  | 275.7mm(10.9inches)   |
| Approx Weight                 | 43.5kg(95.9lbs)               |   |
| Terminal                      | M6(M8 optional)               |   |
| Container Material            | PC-ABS (UL94 V-0)             |   |
| Short-circuit current         | 2970A                         |   |
| Internal Resistance (25°C)    | Approx 3.6 mΩ (Fully charged) |   |
| Operating Temp. Range         | Discharge                     | -40~65°C (-40~149°F)  |
|                               | Charge                        | -20~54°C (-4~129°F)   |
|                               | Storage                       | -20~50°C (-4~122°F)   |
| Nominal Operating Temp. Range | 25±3°C (77±5°F)               |   |
| Max.Charging Current (25°C)   | 0.3C                          |   |
| Charge voltage (25°C)         | Float Charge                  | Equalization Charge   |
|                               | 2.27±0.02V/cell               | 2.35-2.40V/cell   |
| Temp. Coefficient             | -3mV/cell/°C                  | -4mV/cell/°C  |
|                               | 40°C (104°F)                  | 103%  |
| Effect of temp. to Capacity   | 25°C (77°F)                   | 100%  |
|                               | 0°C (32°F)                    | 86%   |
|                               | Self Discharge                | PLX series batteries can be stored up to 24 months at 25°C(77°F), For higher temperatures the time interval will be shorter.Battery needs to be given a freshening charge when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first. |

### DISCHARGE TABLE

| Constant Current Discharge (Amperes) at 25°C (77°F)  |       |       |       |       |       |       |       |       |       |      |      |      |      |      |      |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| F.V/Time   | 5min  | 10min | 15min | 20min | 30min | 45min | 1h    | 1.5h  | 2h    | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
| 1.85V/cell   | 346.1 | 288.8 | 240.9 | 210.8 | 161.6 | 120.0 | 93.6  | 65.2  | 51.2  | 35.8 | 27.9 | 23.8 | 16.1 | 12.9 | 6.49 |
| 1.80V/cell   | 375.8 | 294.6 | 246.3 | 215.7 | 166.0 | 123.0 | 96.2  | 66.8  | 52.2  | 37.4 | 28.8 | 24.1 | 16.6 | 13.5 | 6.79 |
| 1.75V/cell   | 406.3 | 328.0 | 273.5 | 234.6 | 176.5 | 129.2 | 100.1 | 69.3  | 54.3  | 38.3 | 29.5 | 24.5 | 16.8 | 13.6 | 6.84 |
| 1.70V/cell   | 436.5 | 365.1 | 287.2 | 248.7 | 183.7 | 132.4 | 102.5 | 71.0  | 54.8  | 39.1 | 30.1 | 25.0 | 16.9 | 13.8 | 6.90 |
| 1.67V/cell   | 486.0 | 379.0 | 310.3 | 255.4 | 189.2 | 137.1 | 105.0 | 72.5  | 56.8  | 39.5 | 30.5 | 25.5 | 17.2 | 13.9 | 6.96 |
| 1.60V/cell   | 526.3 | 391.8 | 319.1 | 259.8 | 192.1 | 141.1 | 107.7 | 74.2  | 57.2  | 40.0 | 30.8 | 25.8 | 17.4 | 14.0 | 7.04 |
| Constant Power Discharge (Watts/cell) at 25°C (77°F) |       |       |       |       |       |       |       |       |       |      |      |      |      |      |      |
| F.V/Time   | 5min  | 10min | 15min | 20min | 30min | 45min | 1h    | 1.5h  | 2h    | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
| 1.85V/cell   | 655.7 | 496.8 | 464.6 | 408.1 | 318.9 | 232.7 | 182.4 | 127.1 | 99.7  | 72.4 | 56.1 | 47.9 | 32.9 | 26.4 | 13.3 |
| 1.80V/cell   | 729.5 | 564.6 | 477.6 | 417.2 | 330.1 | 237.3 | 184.9 | 128.8 | 101.1 | 74.9 | 57.9 | 49.8 | 33.8 | 26.8 | 13.5 |
| 1.75V/cell   | 781.4 | 612.8 | 519.6 | 446.5 | 335.8 | 245.1 | 190.5 | 130.7 | 104.7 | 76.3 | 59.1 | 50.5 | 34.1 | 27.3 | 13.6 |
| 1.70V/cell   | 824.9 | 654.5 | 536.2 | 457.7 | 346.3 | 249.3 | 192.5 | 131.5 | 105.9 | 77.2 | 59.9 | 50.8 | 34.2 | 27.5 | 13.7 |
| 1.67V/cell   | 885.6 | 682.7 | 560.0 | 464.4 | 350.4 | 260.2 | 201.0 | 135.3 | 109.3 | 77.9 | 60.0 | 51.1 | 34.4 | 27.6 | 13.8 |
| 1.60V/cell   | 904.9 | 689.1 | 575.4 | 473.2 | 359.2 | 264.4 | 202.9 | 137.1 | 110.3 | 78.1 | 60.1 | 51.2 | 34.5 | 27.8 | 13.9 |

# PLX-PURE LEAD HIGH RATE

## PLX12-540 (12V540W)



### APPLICATIONS

- UPS
- Emergency lighting
- Emergency Power supply
- Electric starting
- Power tools

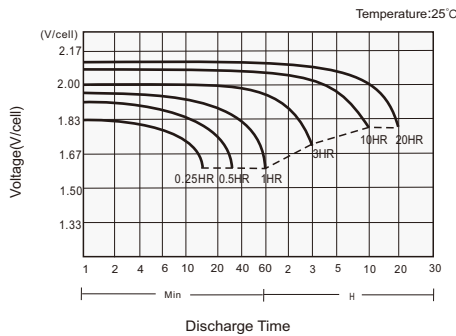
### GENERAL FEATURES

- 15 years design life (25°C)
- Utilizes pure lead technology, thin positive grids and unique manufacturing process to maximize corrosion resistance and service life while increasing energy density
- Specifically designed for high-rate discharge applications
- Wide Wpc range of front and top terminal monoblocs
- UL 94 V-0 Case and cover heat sealed and 100% tested to prevent leaks

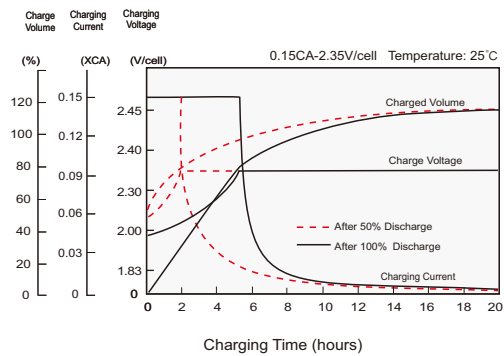
### STANDARDS

- Compliance with IEC 60896 standards
- Classified as "Very Long Life" according to Eurobat
- CE,UL Approved
- Manufactured in Leoch@IATF 16949, ISO 45001,ISO 9001 and ISO 14001 certified production facilities

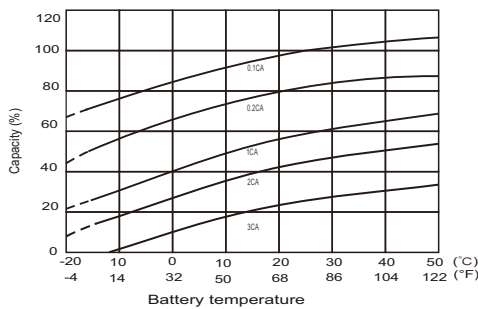
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

