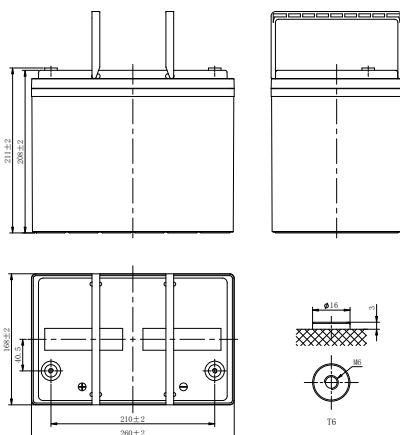


# XP SERIES-ULTRA HIGH RATE

## XP12-300 (12V300W)



### CHARACTERISTICS

| Item                          |                      | Specifications                |
|-------------------------------|----------------------|-------------------------------|
| Rated Voltage                 |                      | 12V                           |
| Nominal Rate (25°C)           | $W_{15}, 1.67V/cell$ | 300W/cell                     |
| Nominal Capacity (25°C)       | $C_{20}, 1.80V/cell$ | 82Ah                          |
| Dimension                     | Length               | 260mm (10.2inches)            |
|                               | Width                | 168mm (6.61inches)            |
|                               | Container Height     | 208mm (8.19inches)            |
|                               | Total Height         | 211mm (8.31inches)            |
| Approx Weight                 |                      | 24.2kg (53.4lbs)              |
| Terminal                      |                      | T6(M6)                        |
| Container Material            |                      | ABS (UL94 HB or V-0 optional) |
| Short-circuit current         |                      | 1886.4A                       |
| Internal Resistance (25°C)    |                      | Approx 4.5 mΩ (Fully charged) |
| Operating Temp. Range         | Discharge            | -15~50°C (5~122°F)            |
|                               | Charge               | -20~40°C (-4~104°F)           |
|                               | Storage              | -15~40°C (5~104°F)            |
| Nominal Operating Temp. Range |                      | 25±3°C (77±5°F)               |
| Max.Charging Current (25°C)   |                      | 0.25C                         |
| Charge voltage (25°C)         | Float Charge         | Equalization Charge           |
|                               | 2.25-2.30V/cell      | 2.30-2.40V/cell               |
| Temp. Coefficient             | -3mV/cell/°C         | -4mV/cell/°C                  |
|                               | 40°C (104°F)         | 106%                          |
| Effect of temp. to Capacity   | 25°C (77°F)          | 100%                          |
|                               | 0°C (32°F)           | 86%                           |
| Self Discharge                |                      | ≤3% per month at 25°C (77°F)  |

### DISCHARGE TABLE

| Constant Current Discharge (Amperes) at 25°C (77°F)  |       |       |       |       |       |       |       |      |      |      |      |      |      |      |      |
|------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| F.V/Time                                             | 5min  | 10min | 15min | 20min | 30min | 45min | 1h    | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
| 1.85V/cell                                           | 192.4 | 146.1 | 126.0 | 110.2 | 85.0  | 63.6  | 51.2  | 29.1 | 20.7 | 16.2 | 13.5 | 11.6 | 9.19 | 7.70 | 4.02 |
| 1.80V/cell                                           | 220.7 | 161.0 | 138.1 | 118.8 | 89.5  | 65.9  | 52.9  | 30.0 | 21.4 | 16.7 | 13.9 | 12.0 | 9.46 | 7.86 | 4.10 |
| 1.75V/cell                                           | 251.1 | 180.8 | 150.2 | 126.0 | 93.3  | 68.0  | 54.3  | 30.9 | 21.9 | 17.1 | 14.2 | 12.3 | 9.66 | 8.00 | 4.17 |
| 1.70V/cell                                           | 276.4 | 196.0 | 160.1 | 134.1 | 98.1  | 70.9  | 55.9  | 31.4 | 22.4 | 17.6 | 14.6 | 12.5 | 9.82 | 8.14 | 4.24 |
| 1.67V/cell                                           | 305.8 | 213.4 | 171.2 | 140.2 | 102.3 | 73.0  | 57.5  | 32.0 | 22.8 | 17.8 | 14.8 | 12.6 | 9.99 | 8.28 | 4.31 |
| 1.60V/cell                                           | 336.2 | 230.3 | 180.7 | 147.6 | 106.3 | 75.7  | 58.8  | 32.6 | 23.1 | 18.2 | 15.1 | 12.9 | 10.2 | 8.43 | 4.36 |
| Constant Power Discharge (Watts/cell) at 25°C (77°F) |       |       |       |       |       |       |       |      |      |      |      |      |      |      |      |
| F.V/Time                                             | 5min  | 10min | 15min | 20min | 30min | 45min | 1h    | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
| 1.85V/cell                                           | 374.2 | 285.7 | 247.8 | 217.9 | 168.9 | 127.0 | 102.5 | 58.4 | 41.9 | 32.9 | 27.4 | 23.7 | 18.8 | 15.8 | 8.30 |
| 1.80V/cell                                           | 425.0 | 311.8 | 269.0 | 232.7 | 176.4 | 130.6 | 105.2 | 59.9 | 42.9 | 33.7 | 28.1 | 24.3 | 19.3 | 16.1 | 8.42 |
| 1.75V/cell                                           | 478.5 | 346.7 | 290.0 | 244.5 | 182.2 | 133.6 | 107.2 | 61.3 | 43.7 | 34.3 | 28.6 | 24.7 | 19.6 | 16.3 | 8.53 |
| 1.70V/cell                                           | 520.7 | 371.7 | 305.4 | 257.5 | 189.6 | 137.9 | 109.5 | 61.9 | 44.4 | 34.9 | 29.1 | 25.0 | 19.8 | 16.5 | 8.61 |
| 1.67V/cell                                           | 571.4 | 401.7 | 324.6 | 267.6 | 196.7 | 141.4 | 112.0 | 62.7 | 44.9 | 35.3 | 29.4 | 25.2 | 20.0 | 16.7 | 8.72 |
| 1.60V/cell                                           | 621.1 | 429.0 | 339.1 | 279.0 | 202.3 | 145.1 | 113.5 | 63.3 | 45.1 | 35.7 | 29.7 | 25.5 | 20.2 | 16.8 | 8.73 |

# XP SERIES-ULTRA HIGH RATE

## XP12-300 (12V300W)



### APPLICATIONS

- UPS
- Hospitals and Testing Laboratories
- Emergency Power Supply
- Electric starting
- Telecommunications
- Data Centers

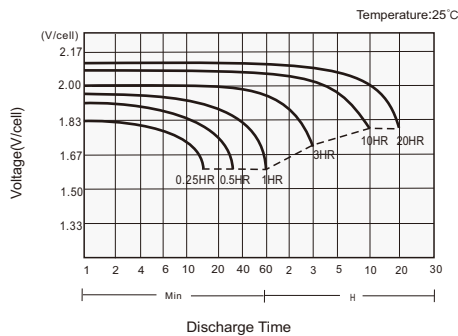
### GENERAL FEATURES

- 12 years design life (25°C)
- Excellent high current performance - optimised for short discharge time
- Advanced AGM technology for superior high-rate power
- Long Life Alloy - minimizing grid growth, reducing gassing and extending battery life
- Epoxy-sealed posts eliminate leaks
- Optimal energy density - saves floor space

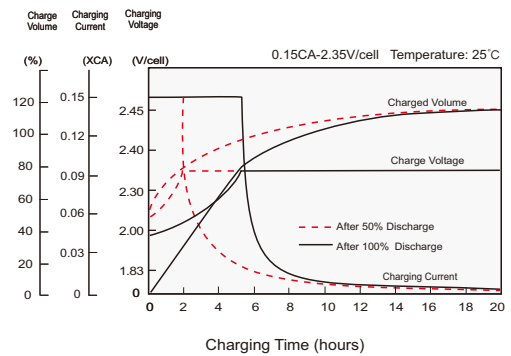
### STANDARDS

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

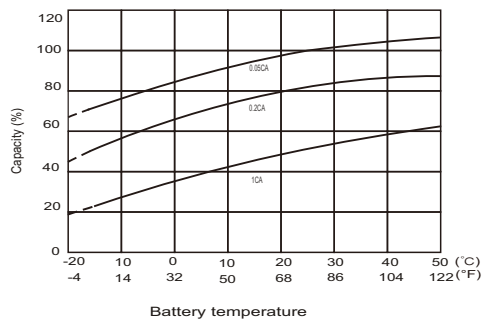
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

