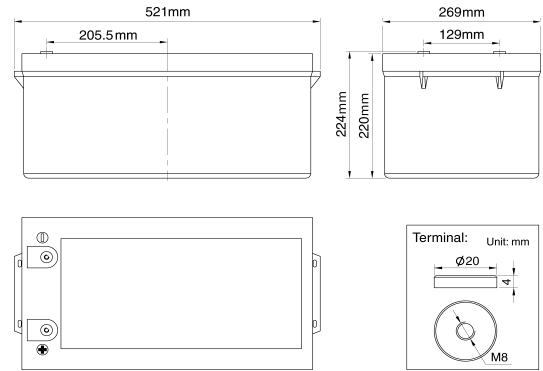


# HL240-12



## Specifications

|                              |                               |                          |
|------------------------------|-------------------------------|--------------------------|
| Nominal Voltage              |                               | 12V                      |
| Rated Capacity(20 hour rate) |                               | 240AH                    |
| Dimension                    | Total Height (with terminals) | 224mm(8.82inches)        |
|                              | Height                        | 220mm(8.66inches)        |
|                              | Length                        | 521mm(20.51inches)       |
|                              | Width                         | 269mm(10.59inches)       |
| Weight                       |                               | Approx.89.0kg(196.21lbs) |

## Characteristics

|   |                                 |   |
|---|---------------------------------|---|
| Capacity<br>77°F(25°C)                          | 20 hour rate(12A)               | 240AH   |
|   | 10 hour rate(22.3A)             | 223.2AH   |
|   | 5 hour rate(41A)                | 205AH   |
|   | 1 hour rate(144A)               | 144AH   |
| Internal Resistance                             | Full charged Battery 77°F(25°C) | 2mΩ   |
| Capacity affected by Temperature (20 hour rate) | 104°F(40°C)                     | 102%  |
|   | 77°F(25°C)                      | 100%  |
|   | 32°F(0°C)                       | 85%   |
|   | 5°F(-15°C)                      | 65%   |
| Self-Discharge<br>77°F(25°C)                    | Capacity after 3 month storage  | 88%   |
|   | Capacity after 6 month storage  | 76%   |
|   | Capacity after 12 month storage | 53%   |
| Max. Discharge Current 77°F(25°C)               |                                 | 3600A(5S)   |
| Terminal  | Standard                        | F17   |
|   | Optional                        | F10   |
| Charging (Constant Voltage)                     | Cycle                           | Initial Charging Current 48A Or Small<br>14.5V~14.9V/77°F(25°C) |
|   | Float                           | 13.6V~13.8V/77°F(25°C)  |

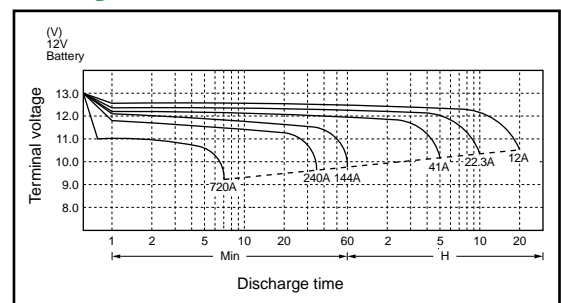
## Constant Power Discharge Watts Per Cell @ 77°F(25°C)

| End Point Volt/cell | Operation Time To End Point Voltage |       |       |       |       |       |       |       |       |
|---------------------|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|                     | 5min                                | 10min | 15min | 20min | 30min | 40min | 50min | 60min | 90min |
| 1.75                | 972                                 | 802   | 683   | 596   | 473   | 383   | 330   | 291   | 187   |
| 1.70                | 1030                                | 848   | 712   | 622   | 485   | 398   | 336   | 292   | 190   |
| 1.67                | 1090                                | 882   | 736   | 625   | 491   | 399   | 342   | 295   | 195   |
| 1.65                | 1102                                | 894   | 750   | 634   | 496   | 401   | 346   | 299   | 199   |
| 1.60                | 1164                                | 932   | 772   | 656   | 503   | 407   | 348   | 301   | 201   |

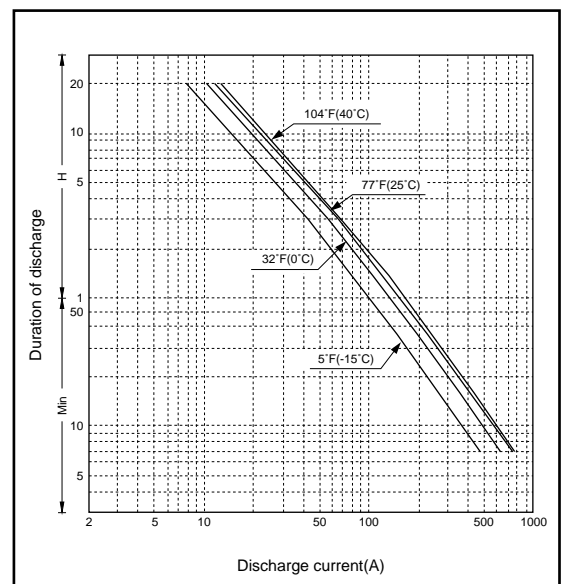
## Constant Current Discharge Rating Amperes @ 77°F(25°C)

| End Point Volt/cell | Operation Time To End Point Voltage |       |       |       |      |      |      |      |      |      |      |      |      |      |
|---------------------|-------------------------------------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
|                     | 5min                                | 10min | 30min | 60min | 2hr  | 3hr  | 4hr  | 5hr  | 6hr  | 7hr  | 8hr  | 10hr | 20hr | 24hr |
| 1.75                | 526                                 | 372   | 250   | 144   | 83.4 | 60.0 | 47.0 | 41.0 | 35.8 | 31.3 | 28.3 | 22.3 | 12.0 | 10.1 |
| 1.80                | 489                                 | 343   | 235   | 140   | 81.6 | 58.0 | 45.6 | 39.8 | 34.7 | 30.3 | 26.9 | 21.5 | 11.8 | 9.86 |
| 1.85                | 384                                 | 293   | 207   | 129   | 75.3 | 54.6 | 43.2 | 37.8 | 33.0 | 28.9 | 25.7 | 20.6 | 11.2 | 9.41 |
| 1.90                | 288                                 | 246   | 179   | 110   | 69.2 | 50.4 | 40.2 | 35.2 | 30.7 | 26.9 | 24.0 | 19.3 | 10.4 | 8.77 |

## Discharge characteristics 77°F(25°C)



## Duration of discharge vs. Discharge current



**Note** The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values.