



## INDIVIDUAL DATA SHEETS

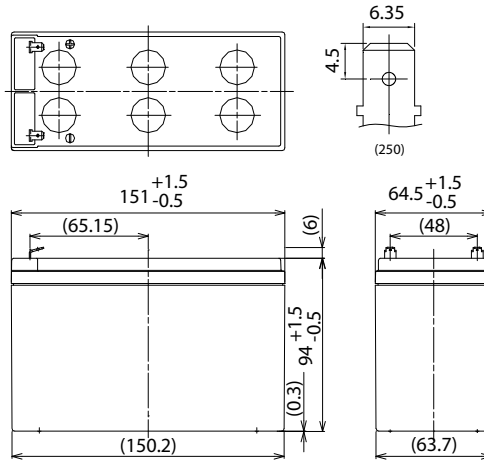
## UP-PW1245P1

FOR STANDBY POWER SUPPLIES.  
 EXPECTED TRICKLE DESIGN LIFE: 10 – 12 YEARS AT 20°C  
 ACCORDING TO EUROBAT.

## DIMENSIONS (MM)



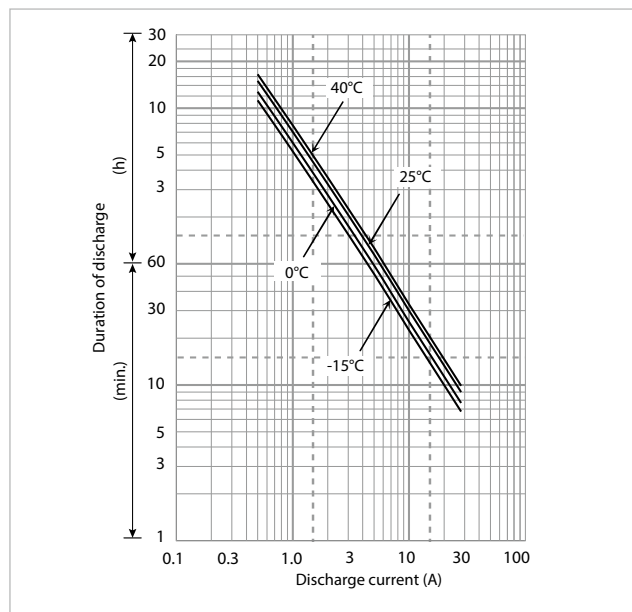
## Terminal type



Contents indicated (including the recycle marking, etc.) are subject to change without notice. Battery case resin: flame-retardant (UL94 V-0)

| Specifications                                         |                              | UP-PW1245P1 |
|--------------------------------------------------------|------------------------------|-------------|
| Nominal voltage (V)                                    |                              | 12          |
| Rated power                                            | 10 minutes rate (W)          | 270         |
| Nominal capacity                                       | 20 hours rate (Ah)           | 7.8         |
| Dimensions                                             | Length (mm)                  | 64.5        |
|                                                        | Width (mm)                   | 151         |
|                                                        | Total height (mm)            | 100         |
| Approx. mass (kg)                                      |                              | 2.60        |
| Terminal type                                          |                              | Faston 250  |
| Power (25°C)                                           | 30 minutes rate (W)          | 112         |
|                                                        | 15 minutes rate (W)          | 195         |
|                                                        | 10 minutes rate (W)          | 270         |
|                                                        | 5 minutes rate (W)           | 410         |
| Impedance (mΩ)                                         | Fully charged battery (25°C) | 20          |
| Temperature dependency of capacity (%) – 20 hours rate | 40°C                         | 102         |
|                                                        | 25°C                         | 100         |
|                                                        | 0°C                          | 85          |
|                                                        | -15°C                        | 65          |
| Remaining capacity (25°C)                              | After 3 months (%)           | 91          |
|                                                        | After 6 months (%)           | 82          |
|                                                        | After 12 months (%)          | 64          |

## DURATION OF DISCHARGE VS. DISCHARGE CURRENT



## WATT TABLE (25°C)

(Wattage/battery)

| Cut-off | 3min. | 5min. | 10min. | 15min. | 20min. | 30min. | 45min. | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 10h  | 20h  |
|---------|-------|-------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|
| 9.6V    | 530   | 410   | 270    | 195    | 159    | 112    | 82.1   | 65.7 | 45.2 | 34.9 | 26.0 | 20.0 | 16.5 | 13.3 | 8.79 | 4.76 |
| 9.9V    | 509   | 400   | 263    | 194    | 158    | 111    | 81.6   | 65.1 | 44.3 | 34.7 | 25.9 | 19.8 | 16.4 | 13.2 | 8.75 | 4.75 |
| 10.2V   | 490   | 390   | 258    | 193    | 156    | 110    | 80.8   | 64.4 | 43.4 | 33.9 | 25.6 | 19.7 | 16.2 | 13.1 | 8.65 | 4.73 |
| 10.5V   | 463   | 360   | 246    | 187    | 151    | 109    | 78.7   | 63.0 | 41.7 | 32.8 | 25.2 | 19.5 | 16.1 | 13.0 | 8.62 | 4.72 |
| 10.8V   | 434   | 330   | 234    | 180    | 146    | 108    | 78.3   | 61.8 | 41.3 | 31.1 | 24.7 | 19.3 | 15.7 | 12.7 | 8.52 | 4.69 |

## AMPERE TABLE (25°C)

(Ampere/battery)

| Cut-off | 3min. | 5min. | 10min. | 15min. | 20min. | 30min. | 45min. | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 10h   | 20h   |
|---------|-------|-------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|-------|-------|
| 9.6V    | 47.7  | 36.8  | 23.9   | 17.0   | 13.7   | 9.57   | 6.99   | 5.57 | 3.82 | 2.95 | 2.19 | 1.67 | 1.38 | 1.11 | 0.732 | 0.397 |
| 9.9V    | 45.8  | 35.9  | 23.5   | 16.9   | 13.6   | 9.55   | 6.95   | 5.50 | 3.75 | 2.93 | 2.17 | 1.66 | 1.37 | 1.10 | 0.729 | 0.396 |
| 10.2V   | 44.1  | 35.0  | 23.0   | 16.8   | 13.5   | 9.49   | 6.88   | 5.46 | 3.67 | 2.86 | 2.15 | 1.65 | 1.36 | 1.09 | 0.721 | 0.394 |
| 10.5V   | 41.6  | 32.3  | 22.0   | 16.3   | 13.0   | 9.40   | 6.70   | 5.35 | 3.53 | 2.77 | 2.11 | 1.64 | 1.35 | 1.08 | 0.718 | 0.393 |
| 10.8V   | 39.0  | 29.6  | 20.9   | 15.7   | 12.6   | 9.32   | 6.67   | 5.25 | 3.50 | 2.62 | 2.08 | 1.62 | 1.31 | 1.06 | 0.710 | 0.391 |

All mentioned values are average values

## UP-PW1245P1

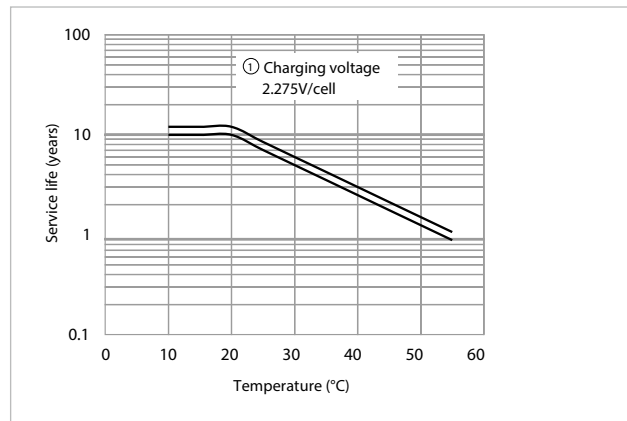
### CHARGING METHOD (25°C)

|           |                                                                    |
|-----------|--------------------------------------------------------------------|
| Cycle use | Control voltage: 13.6V - 13.8V<br>Initial current: 1.2A or smaller |
|-----------|--------------------------------------------------------------------|

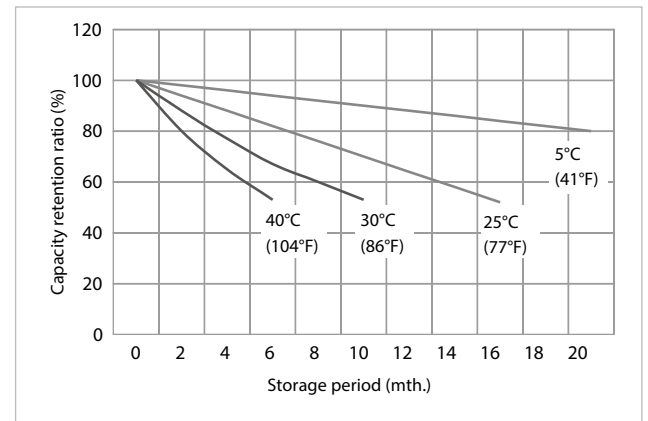
### CUT-OFF VOLTAGE

|                   |             |           |         |          |           |
|-------------------|-------------|-----------|---------|----------|-----------|
| Discharge current | 0.4A - 1.6A | 1.6A - 4A | 4A - 8A | 8A - 16A | 16A - 24A |
| Cut-off voltage   | 10.5V       | 10.2V     | 9.9V    | 9.3V     | 8.7V      |

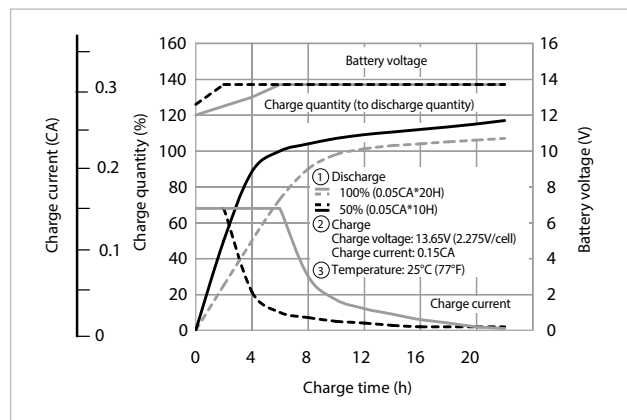
### INFLUENCE OF TEMPERATURE ON TRICKLE LIFE



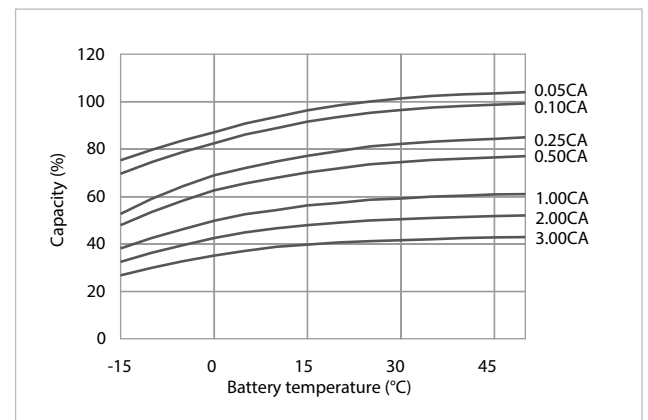
### RESIDUAL CAPACITY TEST RESULT



### CONSTANT-VOLTAGE CONSTANT-CURRENT CHARGE CHARACTERISTICS FOR TRICKLE USE



### DISCHARGE CAPACITY BY TEMPERATURE AND BY DISCHARGE CURRENT



### DISCHARGE CHARACTERISTICS

