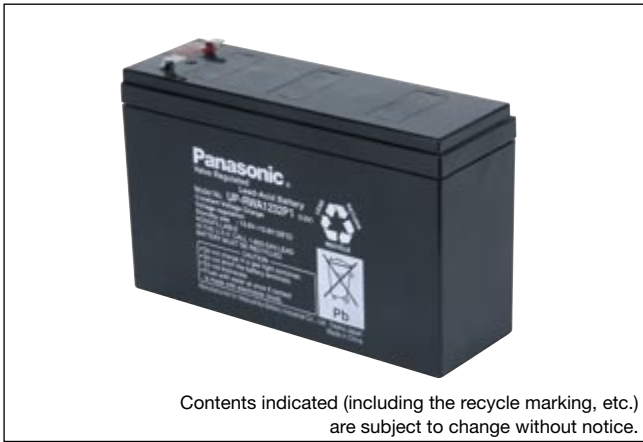


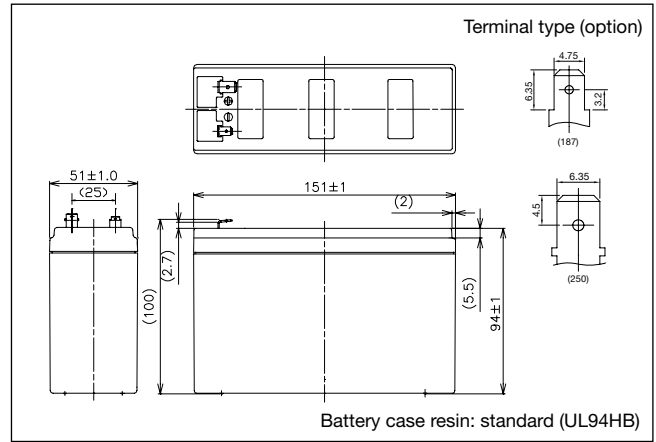
UP-RWA1232P1/P2

For standby power supplies.
Expected trickle design life: 6 – 9 years at 20 °C according to Eurobat.



Contents indicated (including the recycle marking, etc.) are subject to change without notice.

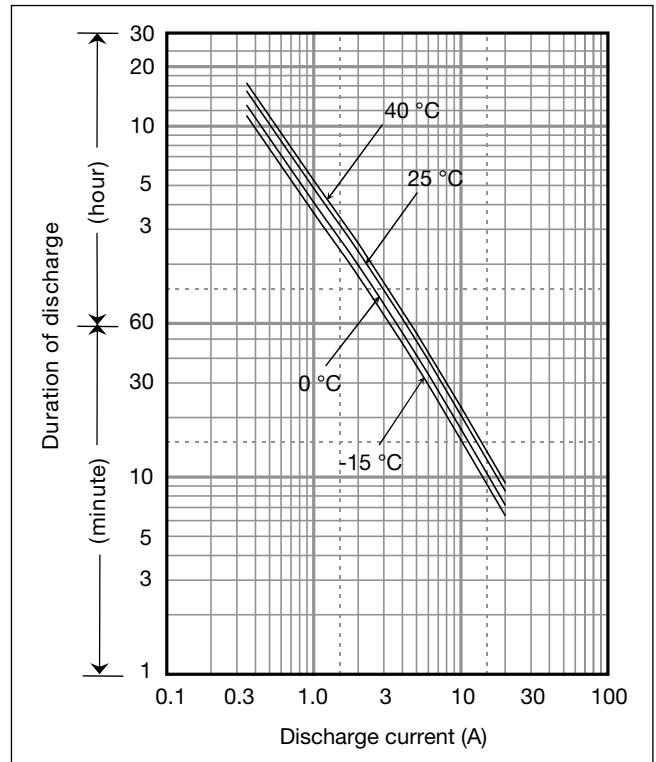
Dimensions (mm)



Specifications

| | | |
|-----------------------------------|--|--------|
| Nominal voltage | 12 V | |
| Nominal capacity (10 minute rate) | 192 W | |
| Dimensions | Length | 151 mm |
| | Width | 51 mm |
| | Height | 94 mm |
| | Total Height | 100 mm |
| Approx. mass | 2 kg | |
| Terminal | Faston 250 with hole or Faston 187/250 mixed | |

Duration of discharge vs Discharge current



Characteristics

| | | |
|---|-------------------------------|-------|
| Capacity (25 °C) | 20 hour rate | 97 W |
| | 10 hour rate | 157 W |
| | 5 hour rate | 192 W |
| | 1 hour rate | 310 W |
| Internal resistance | Fully charged battery (25 °C) | 33 mΩ |
| Temperature dependency of capacity (20 hour rate) | 40 °C | 102 % |
| | 25 °C | 100 % |
| | 0 °C | 85 % |
| | -15 °C | 65 % |
| Self discharge (25 °C) | After 3 months | 91 % |
| | After 6 months | 82 % |
| | After 12 months | 64 % |

Watt Table

(Wattage/Battery)

| Cut-off V | 3min | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 10h | 20h | 24h |
|-----------|------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 9.6V | 410 | 310 | 192 | 157 | 128 | 97.0 | 71.1 | 56.9 | 39.1 | 30.3 | 22.5 | 17.3 | 14.3 | 11.5 | 7.61 | 4.12 | 3.44 |
| 9.9V | 386 | 295 | 187 | 150 | 124 | 95.0 | 70.7 | 56.9 | 38.3 | 30.0 | 22.4 | 17.2 | 14.2 | 11.4 | 7.58 | 4.11 | 3.43 |
| 10.2V | 361 | 281 | 182 | 142 | 120 | 93.0 | 67.7 | 53.9 | 36.3 | 28.4 | 21.5 | 16.5 | 13.6 | 11.0 | 7.25 | 3.97 | 3.31 |
| 10.5V | 327 | 255 | 174 | 136 | 115 | 89.5 | 65.9 | 52.8 | 34.9 | 27.5 | 21.5 | 16.5 | 13.5 | 10.9 | 7.22 | 3.96 | 3.30 |
| 10.8V | 294 | 230 | 164 | 130 | 110 | 86.0 | 61.7 | 48.8 | 32.6 | 24.5 | 19.5 | 15.2 | 12.4 | 10.0 | 6.73 | 3.70 | 3.08 |

Ampere Table

(Ampere/Battery)

| Cut-off V | 3min | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 10h | 20h | 24h |
|-----------|------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|-------|-------|-------|
| 9.6V | 36.9 | 27.8 | 17.1 | 13.7 | 11.0 | 8.29 | 6.06 | 4.83 | 3.31 | 2.56 | 1.89 | 1.45 | 1.19 | 0.96 | 0.634 | 0.344 | 0.287 |
| 9.9V | 34.7 | 26.5 | 16.7 | 13.0 | 10.7 | 8.12 | 6.02 | 4.83 | 3.25 | 2.54 | 1.88 | 1.44 | 1.18 | 0.95 | 0.631 | 0.343 | 0.286 |
| 10.2V | 32.5 | 25.2 | 16.3 | 12.3 | 10.3 | 7.95 | 5.77 | 4.58 | 3.08 | 2.40 | 1.80 | 1.38 | 1.14 | 0.92 | 0.604 | 0.331 | 0.276 |
| 10.5V | 29.5 | 22.9 | 15.5 | 11.8 | 9.9 | 7.65 | 5.61 | 4.48 | 2.96 | 2.32 | 1.81 | 1.38 | 1.13 | 0.91 | 0.602 | 0.330 | 0.275 |
| 10.8V | 26.4 | 20.6 | 14.6 | 11.3 | 9.5 | 7.35 | 5.26 | 4.14 | 2.76 | 2.07 | 1.64 | 1.28 | 1.03 | 0.84 | 0.560 | 0.309 | 0.257 |

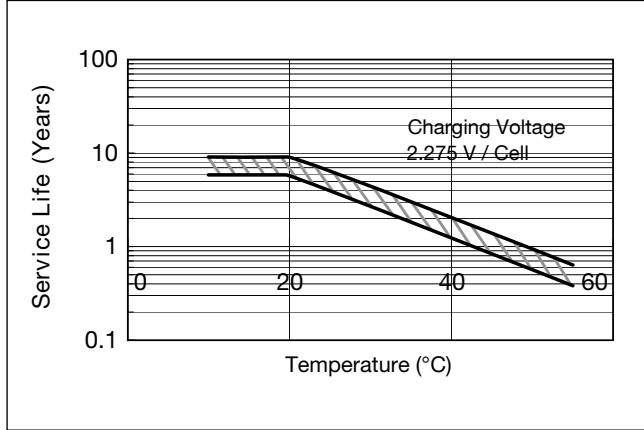
Charging Method

| | |
|-------------|---|
| Trickle use | Control voltage: 13.6 - 13.8 V; Initial current: 1.05 A or smaller |
|-------------|---|

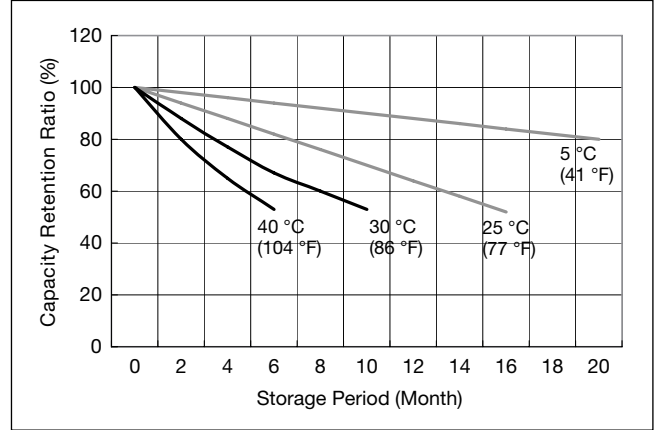
Cut off voltage

| | | | | | |
|---------------------|----------------|---------------|-------------|------------|-------------|
| Discharge current | 0.35 A - 1.4 A | 1.4 A - 3.5 A | 3.5 A - 7 A | 7 A - 14 A | 14 A - 21 A |
| Cut off voltage (V) | 10.5 | 10.2 | 9.9 | 9.3 | 8.7 |

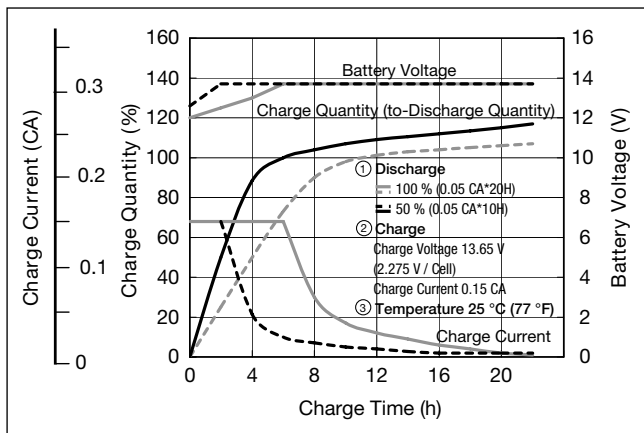
Influence of Temperature on Trickle life



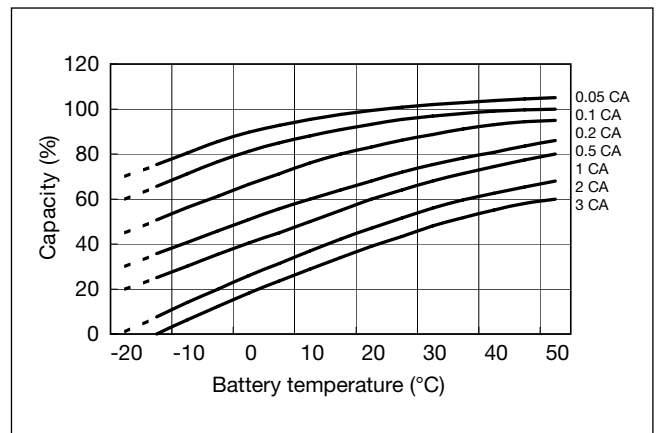
Residual capacity vs storage period



Constant-voltage and constant-current charge characteristics for Trickle use



Discharge capacity by temperature and by discharge current



Discharge characteristics

