

# UBT 12/45

Rechargeable AGM Long Life battery 45 Ah / 12 V



## UBT: Powerful and reliable back-up storage

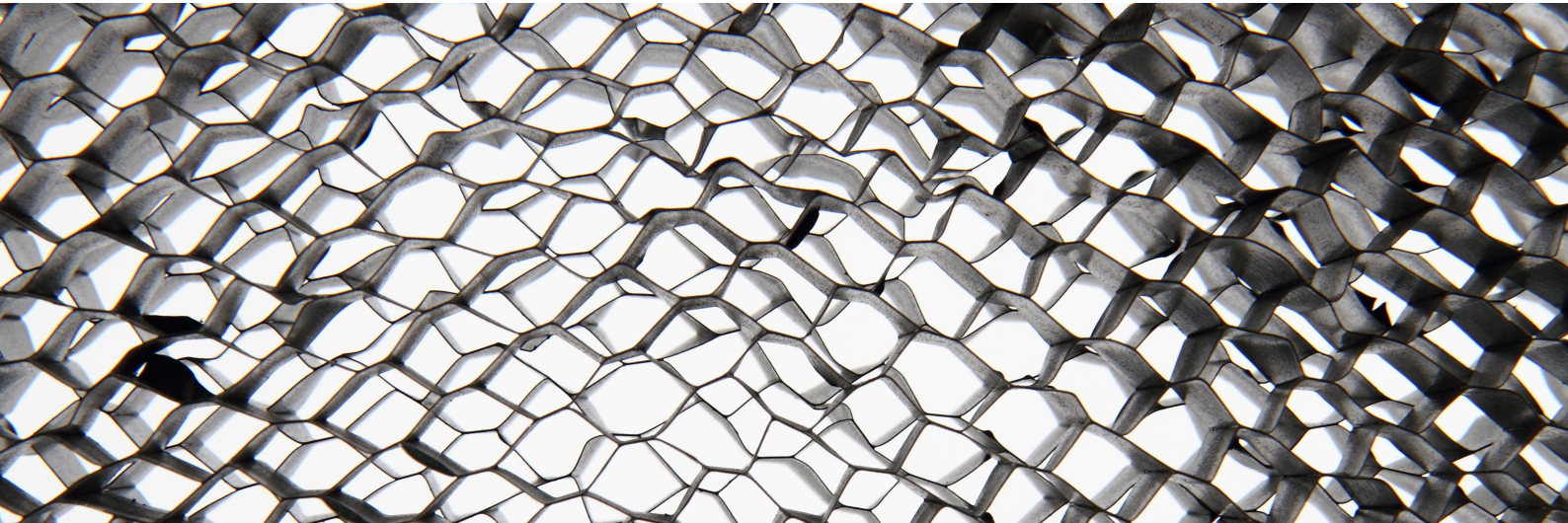
Salicru's **UBT** series batteries are extremely powerful and compact rechargeable lead-lead dioxide energy accumulators particularly suitable for UPSs and other security systems that require reliable and high-quality energy back-up.

Salicru's **UBT** battery range includes 45 Ah at 12 V.

The sulphuric acid electrolyte is absorbed by the separators and plates. And these in turn immobilised. They are designed using gas recombination technology which eliminates the need for the regular addition of water by controlling the evolution of hydrogen and oxygen during charging. The battery is completely sealed and watertight and therefore maintenance free, enabling it to be used in any position. If the battery is accidentally overcharged, resulting in the production of hydrogen and oxygen, a number of special one-way valves allow the gases to escape to avoid interior overpressure.

## Applications:

Uninterruptible power supply systems (UPS), emergency lighting systems, signalling systems, communications and electrical equipment, broadcasting systems, lift automation panels, electronic cash registers, etc.



**SALICRU**

## Performances

- AGM technology for efficient gas recombination of up to 99% and free of maintenance or adding water.
- 10/12 years of long life.
- No restrictions for air transport, compliance with IATA/ICAO Special Provision A67.
- Can be mounted in any position.
- Lead designed by computer with calcium/tin alloy rack for high energy density.
- Long service life in both float and cyclic applications.
- Maintenance-free.
- Low self-discharge



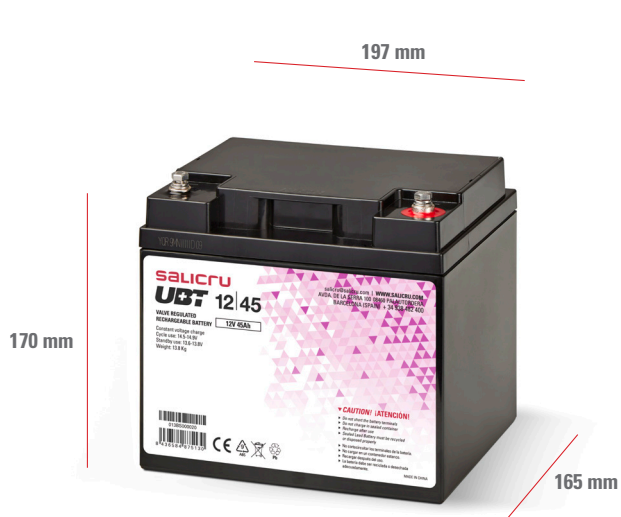
## Battery compatibility vs series

|            | UBT 12/45 |
|------------|-----------|
| SLC CUBE3+ | •         |
| SLC CUBE4  | •         |
| SLC ADAPT2 | •         |
| SLC X-PERT | •         |
| SLC X-TRA  | •         |

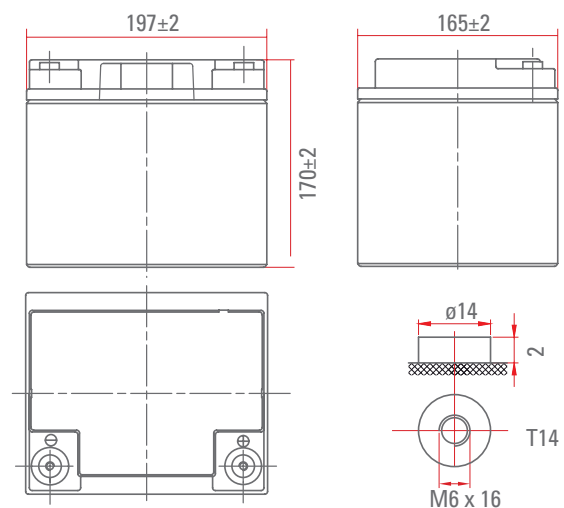
## Battery construction

| COMPONENT      | RAW MATERIAL   |
|----------------|----------------|
| Positive plate | Lead dioxide   |
| Negative plate | Lead           |
| Container      | ABS            |
| Lid            | ABS            |
| Safety valve   | Rubber         |
| Terminal       | Copper         |
| Separator      | AGM            |
| Electrolyte    | Sulphuric acid |

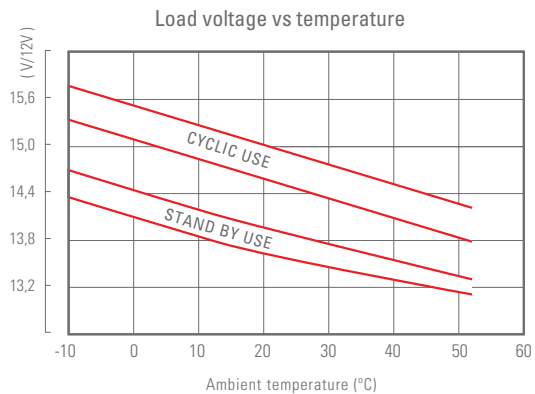
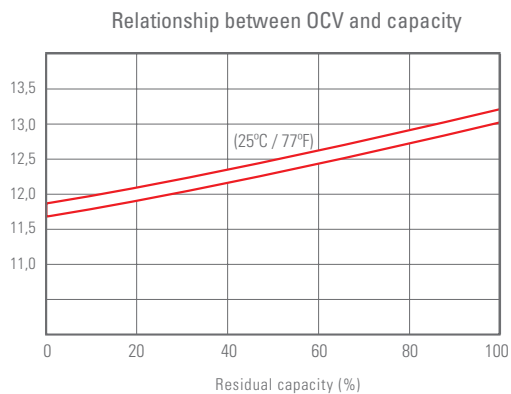
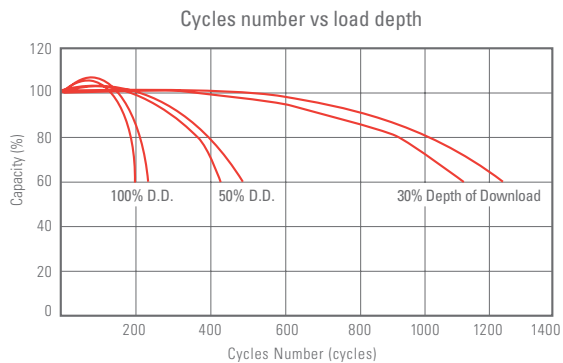
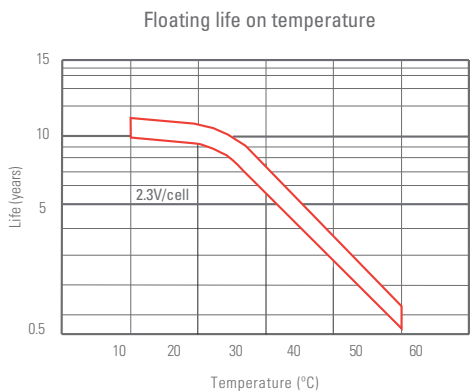
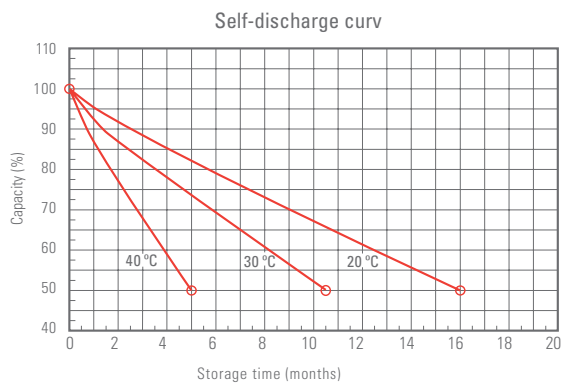
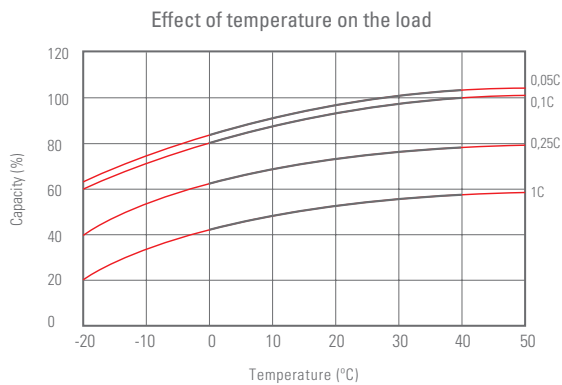
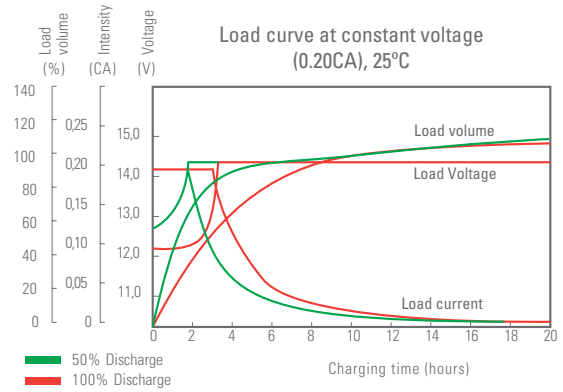
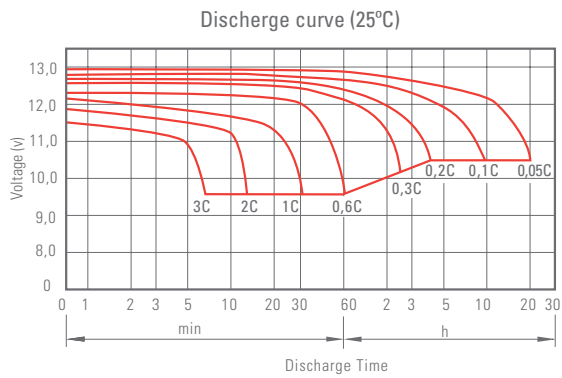
## Dimensions



UBT 12/45



# Behaviour charts



## Technical specifications

| MODEL                                |           | UBT 12/45                 |
|--------------------------------------|-----------|---------------------------|
| Nominal voltage (V)                  |           | 12                        |
| Number of cells                      |           | 6                         |
| Life Clasification                   |           | Long Life                 |
| Rated capacity at 25°C               | 20 hours  | 47.80 Ah (2.39 A, 10.8 V) |
|                                      | 10 hours  | 45 Ah (4.50 A, 10.8 V)    |
|                                      | 5 hours   | 38.40 Ah (7.68 A, 10.8 V) |
|                                      | 1 hour    | 25 Ah (25.00 A, 10.8 V)   |
| Internal resistance                  |           | ≤7.5 mΩ <sup>(1)</sup>    |
| Self-discharge                       |           | 3% <sup>(2)</sup>         |
| Operating temperature range          | Discharge | -15°C ÷ +50°C             |
|                                      | Charge    | -10°C ÷ +50°C             |
|                                      | Storage   | -20°C ÷ +50°C             |
| Maximum discharge current            |           | 400 A (5s)                |
| Dimensions                           | Depth     | 197 mm ±2 mm              |
|                                      | Width     | 165 mm ±2 mm              |
|                                      | Height    | 170 mm ±2 mm              |
| Overall dimensions (with connectors) | Height    | 170 mm ±2 mm              |
| Weight                               |           | 13.80 Kg                  |
| CODE                                 |           | 013BS000020               |

(1) Fully charged battery at 25°C

(2) Reduction of capacity per month at 20°C (average)

Information subject to change without notice.

## Constant discharge current (25°C)

| Cut-off voltage per cell (V/cell) | 10 min | 15 min | 30 min | 60 min | 2 h  | 3 h  | 4 h  | 5 h  | 8 h  | 10 h | 20 h |
|-----------------------------------|--------|--------|--------|--------|------|------|------|------|------|------|------|
| 9.60 V                            | 98.1   | 75.6   | 45.2   | 27.8   | 16.4 | 11.8 | 9.46 | 8.08 | 5.55 | 4.58 | 2.43 |
| 9.90 V                            | 95.2   | 73.8   | 44.3   | 27.4   | 16.3 | 11.8 | 9.40 | 8.03 | 5.52 | 4.57 | 2.42 |
| 10.2 V                            | 91.2   | 71.1   | 43.0   | 26.7   | 16.2 | 11.7 | 9.33 | 7.98 | 5.48 | 4.56 | 2.42 |
| 10.5 V                            | 87.3   | 68.6   | 41.9   | 25.9   | 16.0 | 11.6 | 9.27 | 7.92 | 5.45 | 4.53 | 2.40 |
| 10.8 V                            | 82.4   | 65.0   | 40.4   | 25.0   | 15.6 | 11.3 | 8.99 | 7.68 | 5.28 | 4.50 | 2.39 |

## Constant discharge power (25°C)

| Cut-off voltage per cell (V/cell) | 10 min | 15 min | 30 min | 60 min | 2 h | 3 h | 4 h | 5 h  | 8 h  | 10 h | 20 h |
|-----------------------------------|--------|--------|--------|--------|-----|-----|-----|------|------|------|------|
| 9.60 V                            | 1059   | 830    | 507    | 317    | 190 | 139 | 111 | 95.5 | 66.0 | 54.7 | 29.1 |
| 9.90 V                            | 1028   | 810    | 497    | 312    | 189 | 138 | 111 | 94.9 | 65.6 | 54.6 | 29.1 |
| 10.2 V                            | 985    | 780    | 482    | 304    | 188 | 137 | 110 | 94.3 | 65.1 | 54.4 | 29.0 |
| 10.5 V                            | 943    | 854    | 470    | 295    | 185 | 137 | 109 | 93.6 | 64.7 | 54.1 | 28.8 |
| 10.8 V                            | 890    | 714    | 453    | 285    | 180 | 132 | 106 | 90.8 | 62.7 | 53.7 | 28.6 |

The data shown above relates to average values obtained after 3 charge/discharge cycles, not minimum values.

