

# Yuasa Technical Data Sheet



## Yuasa EN540-2 Industrial VRLA Battery

### Specifications

|   |      |
|---|------|
| Nominal voltage (V)   | 2    |
| 10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell) | 2169 |
| 10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)               | 540  |

### Dimensions

|             |          |
|-------------|----------|
| Length (mm) | 305 (±3) |
| Width (mm)  | 210 (±2) |
| Height (mm) | 240 (±2) |
| Mass (kg)   | 37.5     |

### Terminal Type

|  |          |
|--|----------|
| Threaded terminal - (M=Male or F=Female) | M8 (F)   |
| Torque (Nm)                              | 6 (±0.5) |

### Operating Temperature Range

|                                      |                |
|--------------------------------------|----------------|
| Storage (in fully charged condition) | -20°C to +50°C |
| Charge                               | -15°C to +50°C |
| Discharge                            | -20°C to +60°C |

### Storage

|   |   |
|---|---|
| Capacity loss per month at 20°C (% approx.) | 3 |
|---|---|

### Case Material

|          |               |
|----------|---------------|
| Standard | ABS (UL94:V0) |
|----------|---------------|

### Charge Voltage

|   |            |
|---|------------|
| Float charge voltage at 20°C (V)/Block                      | 2.26 (±1%) |
| Float charge voltage at 20°C (V)/Cell                       | 2.26 (±1%) |
| Float Chg voltage tmp correction factor from std 20°C (mV)  | -3         |
| Cyclic (or Boost) charge Voltage at 20°C (V)/Block          | 2.40 (±2%) |
| Cyclic (or Boost) charge Voltage at 20°C (V)/Cell           | 2.40 (±2%) |
| Cyclic Chg voltage tmp correction factor from std 20°C (mV) | -4         |

### Charge Current

|  |          |
|--|----------|
| Float charge current limit (A)             | No limit |
| Cyclic (or Boost) charge current limit (A) | 135      |

### Maximum Discharge Current

|              |      |
|--------------|------|
| 1 second (A) | 4500 |
| 1 minute (A) | 2880 |

### Short-Circuit Current & Internal Resistance

|  |      |
|--|------|
| Internal resistance - according to EN IEC 60896-21 (mΩ)  | 1.71 |
| Short-Circuit current - according to EN IEC 60896-21 (A) | 4157 |

### Impedance

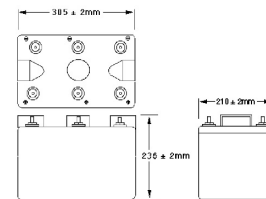
|                        |                   |
|------------------------|-------------------|
| Measured at 1 kHz (mΩ) | 0.5 (single cell) |
|------------------------|-------------------|

### Design Life & Approvals

|  |     |
|--|-----|
| EUROBAT Classification: Very Long Life | 12+ |
| Yuasa design life at 20°C (yrs)        | 12  |



### Layout



### 3rd Party Certifications

ISO9001 - Quality Management Systems  
ISO14001 - Environmental Management Systems  
ISO45001 OHSAS Management Systems  
UNDERWRITERS LABORATORIES Inc.



## Safety

### Installation

Can be installed and operated in any orientation except permanently inverted.

### Handles

Batteries must not be suspended by their handles (where fitted).

### Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

### Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

### Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

