

# Ni-MH

## High Power Cycling Battery



Pluggable battery for high cycling applications.  
Ideal for combination of short time backup and high peak power surges.

|  |                           |                          |                         |  |                                    |
|--|---------------------------|--------------------------|-------------------------|--|------------------------------------|
| <b>Battery Type:</b><br>Power > Energy | <b>Voltage:</b><br>48 Vdc | <b>Capacity:</b><br>6 Ah | <b>Cycles:</b><br>8 000 | <b>Current discharge:</b><br>Up to 50C | <b>Specific Power:</b><br>351 W/kg |
|--|---------------------------|--------------------------|-------------------------|--|------------------------------------|

### Pluggable battery?

The solution is designed to accommodate **up to 6 battery pack** modules in a standard 19 inches **shelf** (parallel and/or series configurable). To **install** the battery modules, **increase the capacity** afterwards or even replace a module, it is fully plug & play, **safe** (48Vdc) and **light** (8.2 kg). No BMS is required (CCCV charging method), this solution is as simple to manage as all modular CE+T power converters.



### 1000 surges, every day!

These Ni-MH battery cells are designed to withstand a **thousand of surges per day** for more than 10 years (more than 3 million surges during its lifetime). This solution is ideal for short backup of a few minutes, to substitute a **flywheel** and to absorb a large amount of **inrush currents** of any type of loads. The high temperature stability offered by Ni-MH technology saves **costs, space** and **weight** for multiple applications.

### Don't worry, it's safe!

This Ni-MH **sealed** battery is composed of **aqueous electrolyte**. It's therefore not flammable, explosive, corrosive or toxic, **no restrictions for transport** by air, road, rail or sea. No specific authorization or training for your technicians and UL1973 compliant.

### Be green

This mature technology (Ni-MH was already used in the automotive industry 20-year-Toyota Prius) also environment-friendly and fully recyclable as it does **not contain heavy metals** (RoHS compliant product).



50 kW all-in-one power system

Illustrations are non-binding and may include customized fittings.

# Ni-MH Specifications

| Power and Energy                     |   |
|--------------------------------------|---|
| Nominal Voltage                      | 48 V  |
| Nominal Capacity                     | 6 Ah  |
| Specific Power                       | 351 W/kg  |
| Charge / Discharge                   |   |
| Max. continuous discharge current    | 240 A   |
| Max. instantaneous discharge current | 300 A   |
| Self-discharge rate at 25°C          | < 15% for 30 days (initial SoC: 65%)  |
| Max. continuous charge current       | 100 A   |
| Max. instantaneous charge current    | 180 A   |
| Performances                         |   |
| Cycle Life                           | > 8 000 cycles (@ 80% DoD)  |
| Capacity Efficiency                  | > 95%   |
| Mechanical                           |   |
| Battery pack                         | 40 cells (1.2V each)  |
| Modularity                           | Up to 6 battery pack in one standard 19" shelves  |
| Ingress Protection                   | IP2x  |
| Battery Size (with sleeve)           | 704 x 84 x 72 mm  |
| Battery Weight                       | 8.2 kg  |
| Environment                          |   |
| Storage Temperature                  | -40°C to 65°C   |
| Operating Temperature                | -30°C to 65°C   |
| Storage Life                         | > 8 years (> 40% SOC)   |
| Operating Life                       | > 40000 Ah  |
| Certifications                       | cUL1973 + IEC 62133 + CE marking  |
| Safety                               | No explosion and no catching fire during over-discharge, overcharge, short-circuit, heating, crush or impale tests.   |
| Transport & Regulations              | No transport restrictions and compliant with: <ul style="list-style-type: none"><li>• IATA Dangerous Goods Regulation</li><li>• ICAO Technical Instructions</li><li>• US hazardous materials regulations (49 CFR)</li><li>• REACH 06-1907/CE</li><li>• European community directive 91-157/CE for recycling</li></ul> |
| Part Number                          | V090248006  |