

# 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> Power > Energy	<b>Voltage:</b> 48 Vdc	<b>Capacity:</b> 6 Ah	<b>Cycles:</b> 8 000	<b>Current discharge:</b> Up to 50C	<b>Specific Power:</b> 351 W/kg
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### 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 by Arts Energy: Specifications

Power and Energy	
Nominal Voltage (range)	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>
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