

VH D 9500 XP

Super High Energy series

ARTS Energy's VH XP super high energy Ni-MH series are perfectly suited to power tool, mobility markets and other professional appliances. The "XP" stands for eXtended Power and illustrates the higher power capability of the series.

To meet customers' requirements, ARTS Energy provides custom-designed and standardized battery packs.

For your battery design and system needs, please contact ARTS Energy's engineers.

Applications

- Electric bicycles, wheelchairs and medical carts
- Professional lighting
- Lawn and gardening tools
- Vacuum cleaners
- Military equipment

Main advantages

- Super high capacity
- Quick and fast charge
- High power capability
- Excellent cycling performance
- Good storage ability

Technology

- Foam positive electrode
- Metal-hydride negative electrode

Temperature range in discharge

- 10°C to + 40°C

Storage

Recommended: + 5°C to + 25°C

Relative humidity: 65 ± 5 %



Electrical characteristics			
Nominal voltage (V)	1.2		
Typical capacity (mAh)*	9500		
IEC minimum capacity (mAh)*	9000		
IEC designation	HRH 33/62		
Impedance at 1000 Hz (mΩ)	3		
<small>* Charge 16 h at C/10, discharge at C/5.</small>			
Dimensions			
Diameter (mm)	32.15 ± 0.1		
Height (mm)	58.2 ± 0.4		
Top projection (mm)	1.4 ± 0.4		
Top flat area diameter (mm)	5.6		
Weight (g)	168		
<small>Dimensions are given for bare cells.</small>			
Charge conditions Rate	Time (h)	Temp. (°C)	Charge current (mA)
Fast	2-3	0 to + 35	up to 5000
Standard	16	0 to + 40	900
Topping	(after a main charge)		300 to 900
Trickle	(after topping)		50 to 300
<small>End of charge cut-off is requested: dT/dt recommended, -dV acceptable.</small>			
Maximum discharge current			
Continuous (A) at + 20°C	70		
Peak (A) at + 20°C*	150		
<small>* Peak duration: 0.3 second - final discharge Voltage 0.6 Volt/Cell.</small>			

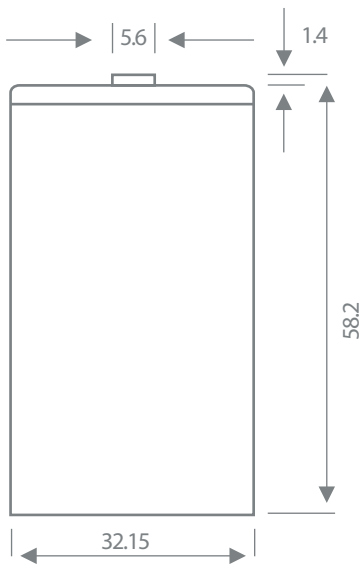


Advanced Rechargeable Technology and Solutions



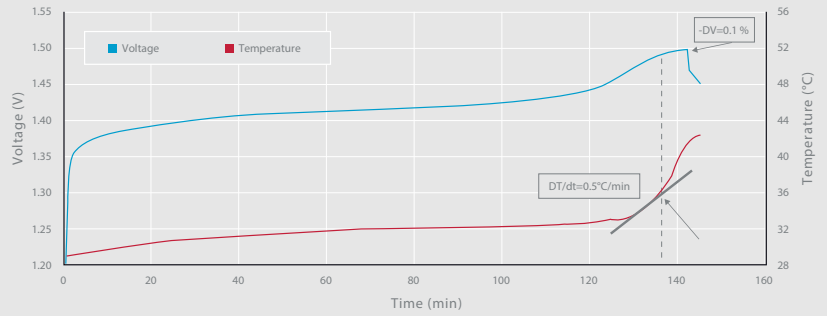
Typical performances

For graphs shown, C is the IEC₅ capacity.

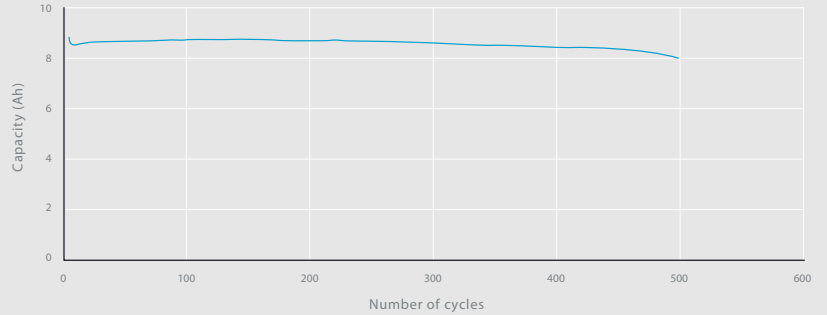


Dimensions are in mm.

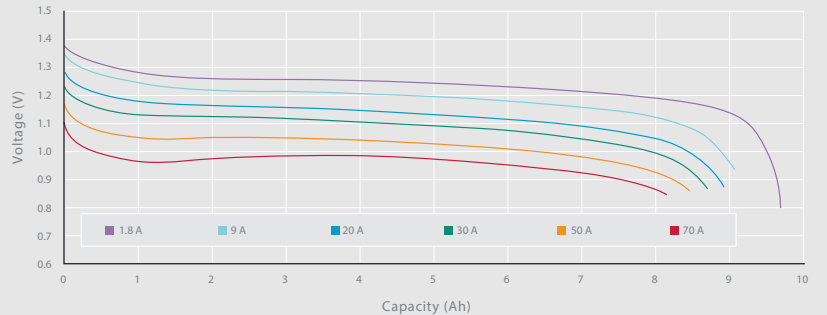
Voltage and temperature during charge at 4 A



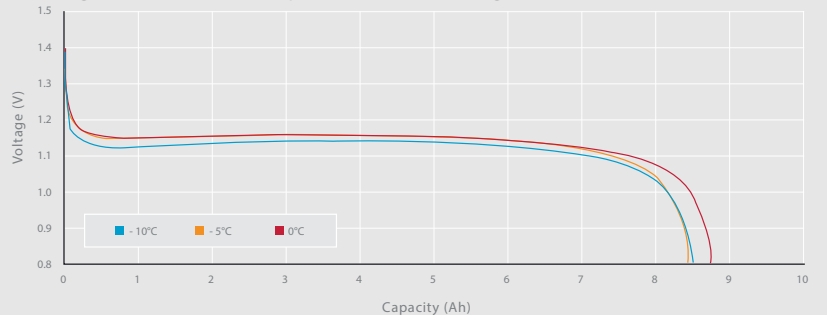
Capacity change during cycling (charge 4.5 A, discharge 9 A)



Discharge at different rates, after charge 2h24 at 4.5 A



Discharge at 9 A at different temperatures, after fast charge at 4 A



Data are given for single cells. Please consult ARTS Energy for utilization of cell outside this specification.

Data in this document are subject to change without notice and become contractual only after written confirmation by ARTS Energy.



10, rue Ampère
Zone Industrielle
16440 Nersac, France
Tél. +33(0)5 45 90 35 50
www.arts-energy.com