

# VST AA

## High Temperature Series

ARTS Energy's VST high temperature Ni-Cd series are perfectly suited to emergency and security equipment applications. It is designed to accept a permanent charge for a minimum of 4 years in high temperature environments (+ 40°C).

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

- Emergency lighting
- Memory back-up systems
- Security devices

### Main advantages

- Good charge efficiency at high temperatures
- Permanent charge especially at low charge rate (down to 20 mA)

### Technology

- Foam positive electrode
- Plastic bonded negative electrode

### Temperature range in discharge

- 20°C to + 70°C

### Storage

Recommended: + 5°C to + 25°C  
Relative humidity: 65 ± 5 %



Electrical characteristics			
Nominal voltage (V)	1.2		
Typical capacity (mAh)*	860		
IEC minimum capacity (mAh)*	800		
IEC designation	KRMT 15/49		
Impedance at 1000 Hz (mΩ)	30		
* Charge 16 h at C/10, discharge at C/5.			
Dimensions			
Diameter (mm)	13.9 ± 0.1		
Height (mm)	48.9 ± 0.3		
Top projection (mm)	0.8 ± 0.2		
Top flat area diameter (mm)	4.0 ± 0.2		
Weight (g)	26		
Dimensions are given for bare cells.			
Charge conditions Rate	Time (h)	Temp. (°C)	Charge current (mA)
Standard	16	+ 15 to + 40	80
Permanent		+ 15 to + 40	40
Trickle*			12 - 25
*Trickle charge follows full charge.			
Maximum discharge current			
Continuous (A) at + 20°C	2.8		
Peak (A) at + 20°C*	15		
* Peak duration: 0.3 second - final discharge voltage 0.65 volt/cell.			

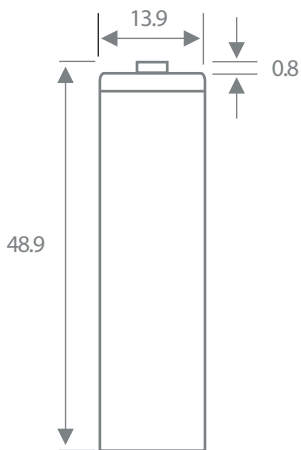


Advanced Rechargeable Technology and Solutions



## Typical performances

For graphs shown, C is the IEC<sub>5</sub> capacity.

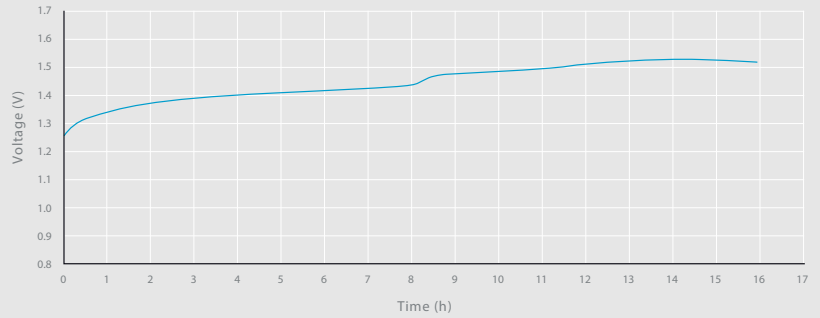


Dimensions are in mm.

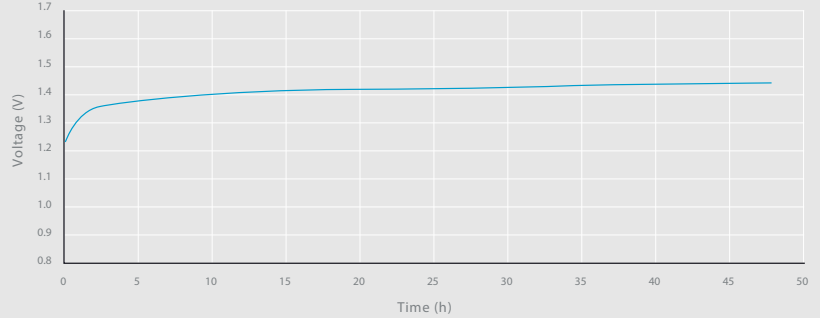
Data are given for single cells. Please consult ARTS Energy for utilization of cell outside this specification.

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

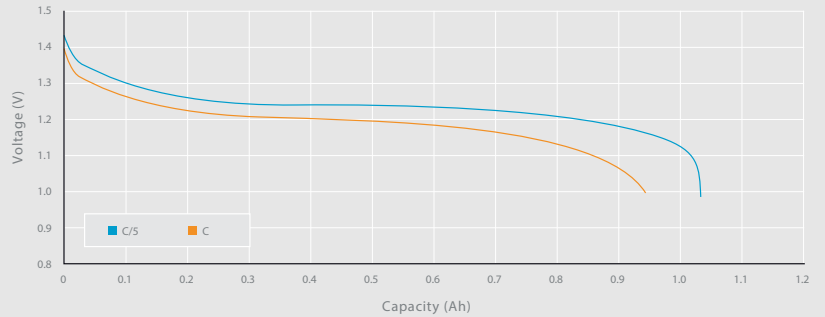
Charge 16h at C/10 at room temperature



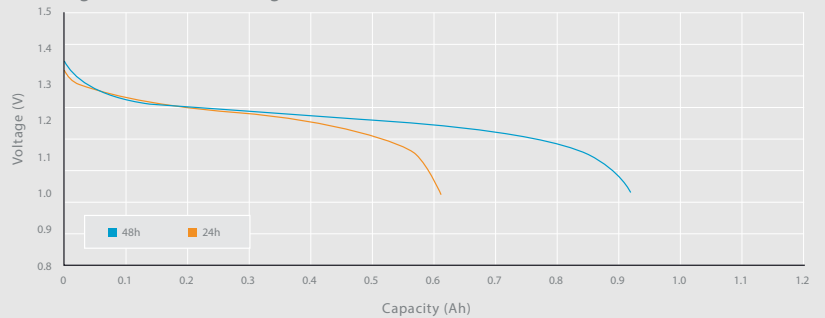
Charge 48h at C/20 at +40°C



Discharge at various rates after charge 16h at C/10 at room temperature



Discharge at 1C rate after charge at C/20 at +40°C



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