

# New Vantex

The 1st Ni-Cd battery  
designed to operate in narrow  
DC voltage windows

Ni-Cd  
Batteries  
**datasheet**

**The last generation of Vantex is the perfect fit to replace lead-acid batteries thanks to its 1.39 V/cell single level charge. Its fast recharge enables 95% State-Of-Charge (SOC) in 8h for minimal downtime and optimal availability. Those improvements come in addition to the key existing benefits of the Vantex range such as maintenance-free\* operation with complete reliability for backup power applications and long operational life of over 20 years.**

## The perfect fit to replace lead-acid batteries

Thanks to its 1.39 V/cell single level charge, without the need for boost charge, Vantex can be fitted in all commonly used DC-systems.

Dropping diodes or DC/DC converters are less required. Thus, the cost for the DC-system can be reduced as less components are needed.

In addition, its fast recharge enables 95% SOC in 8h at 1.45 V/cell for optimal availability after a power failure.

## Reliable support to critical systems

Vantex batteries are at the heart of power backup systems throughout the utility applications, oil and gas exploration and production and manufacturing industries.

If main power is lost, Vantex ensures the continuity of mission-critical loads, bridges to standby power, facilitates safe shutdown processes and safeguards computer data.

Typical power backup applications include UPS, substation switchgears, process control systems, emergency lighting, fire alarms and security systems.



\* The term maintenance-free means that no addition of water is necessary during the life time of the product when operating under Alcad's recommended conditions.

Reliability inside

**ALCAD**

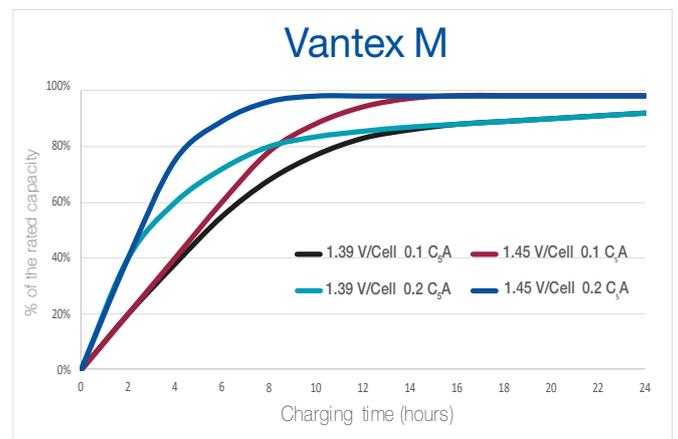
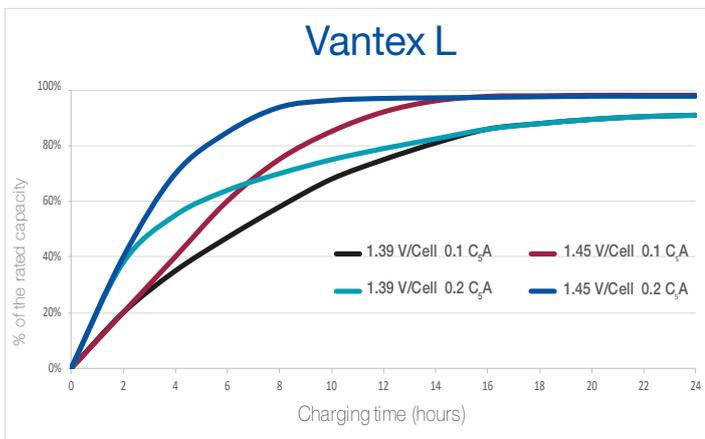
## Features and benefits

Features	Benefits
Single level charging at 1.39 (+/- 0.01) V/cell	Dropping diodes or DC/DC converters are less required
Fast-charging, 95% SOC in 8 hours	Minimal downtime and maximum availability
Long operational life of over 20 years at + 25°C (+77°F)	Low Total Cost of Ownership (TCO)
No memory effect	No need for oversizing
Proven Ni-Cd electrochemistry with no corrosion	No risk of sudden death or open circuit
Maintenance-free, no topping-up	Less site visits needed
Safe operation in a wide temperature range, - 20 (-4°F) to + 40°C (+104°F)	No need for temperature controlled environment avoiding A/C-related costs
Tolerates extreme temperatures - 40°C (-40°F) to + 70°C (+158°F) for short duration	Can be used in harsh environments
Tolerates fully discharging at sub-zero temperatures	No risk of freezing
Can be stored filled with electrolyte and charged for up to 2 years at 30°C (+86°F)	Convenient project planning
Very low gas emission	Less ventilation needed
Compliant with both IEC 62259 and IEC 60623	Fulfils all commonly used industry specifications
Compliant with IEC 62485-2	Ensures safe installations

## Technical Specifications

	VTX1 L energy range (L type)	VTX1 M medium power range (M type)
	For low-rate discharges over long periods between 1 and 100 hours	For mixed loads with low and high discharge rates, between 30 minutes and 3 hours
Capacity range (C <sub>5</sub> rate)	15 to 1700 Ah	8 to 1330 Ah
Charge voltage	Single level: 1.39 (+/- 0.01) V/cell Two level: 1.39 (+/- 0.01) V/cell float, 1.45 V/cell boost	
Recharge	95% SOC in 8 hours @ 20-25°C (+68-77°F) 1.45 V/cell, 0.2 C <sub>5</sub> A	
Topping up interval	No topping up needed when charged according to specification	

Available capacity after constant voltage charge  
Available charge current 0.1 C<sub>5</sub>A or 0.2 C<sub>5</sub>A at + 20°C (+ 68°F)



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