NEOVOLTA POWER

NEOVOLTAPOWER.COM
800.364.5464

NVApex-5M

UTILITY SCALE ENERGY STORAGE

Liquid Cooled DC Utility-Scale Battery

FEOC COMPLIANT
DOMESTIC CONTENT ELIGIBLE

SPECS

1331.2V
Nominal Voltage

5.0 MWh
Nominal Capacity

LFP 314Ah
Cell Type



intertek
Total Quality. Assured.

01

Patented iCCS Technology

The Intelligent Cell Contact System enhances safety and reliability through precise cell monitoring and analysis.

02

Precision Temperature Control

Liquid cooling helps manage battery temperatures for consistent performance.

03

More Energy. Flexible Layouts.

5.0 MWh in a 20-foot container with side-by-side or back-to-back placement helps maximize storage and accommodate site constraints.

04

Layered Safety Protection

Fire detection and suppression, three-level BMS monitoring, and automatic cluster isolation support system safety.

Performance Data	NVApex-5M

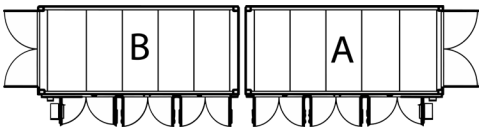
DC

Cell Chemistry	LFP
Cell Capacity (Ah)	314 Ah
System battery configuration	12* (1P104S*4)
Rated Energy	5015.96 kWh
Nominal DC Voltage	1331.2 VDC
Operating Voltage range	1164.8 ~ 1497.6 VDC
Max. Charge/ Discharge Rate	0.5C (2hr)
Max Round Trip Efficiency	94%
Rated Cycle Life	8000 cycles @ 25, 0.5C/0.5C, 95%DOD 70%EOL
PCS Connection	Two PCS units, One per busbar
DC Outputs	2
Rated Charge/Discharge Current	2*942 A
Max. Charge/Discharge Current	2*1074 A
Rated Charge/Discharge Power	2*1253.99 kW
Short Circuit Current	38.2 kA

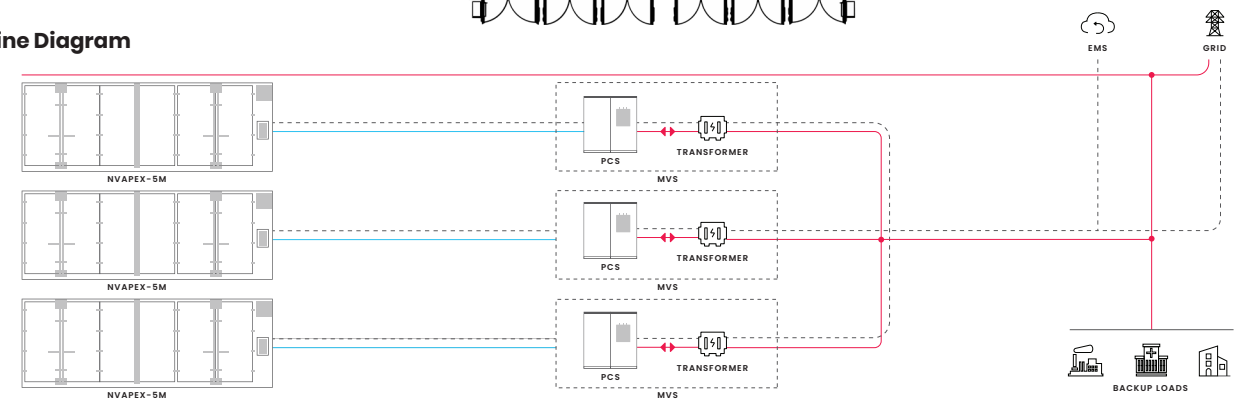
General Parameters

Busbar Count / Racks	Dual Busbar / 6 Racks per Bus
Container Orientation	A Layout (B Mirrored Layout Optional)
Dimensions (W×D×H) mm/ in	6058 × 2438 × 2896 (mm) / 238.5 × 96.0 × 114.0 (in)
Weight (t / lbs)	≈ 41.5 t / 91,492 lbs
Ingress Protection/ NEMA	IP55/ Type 3R
Anti-corrosion degree	C4 (C5 Optional)
Operation Humidity Range	0 to 95%, RH (no condensation)
Operating Temperature Range °F / °C	-22 °F to 131 °F / -30 °C to 55 °C*
Storage Temperature Range °F / °C	Recommended: 32°F to 86°F / 0°C to 30°C, ≤ 6 months -40°F to 86°F / -40°C to 30°C, ≤ 15 months 86°F to 104°F / 30°C to 40°C , ≤ 11 months 104°F to 140°F / 40°C to 60°C , ≤ 7 months
Max. Operating Altitude (m / ft)	≤ 2000 m / 6561.7 ft*
Cooling Method	Liquid
Noise	≤75 dB(A)
Fire Suppression System	Aerosol + water spray fire extinguishing, container-level fire suppression
Communication Interface	Ethernet, RS485, CAN
Communication Protocol	Modbus TCP/RTU, IEC 104, IEC61850
Standard Compliance**	UL 9540 3rd Ed, UL 9540A, UL 1973, UL 60730, FCC, NFPA 68, NFPA 69, HMA, NFPA 855, UL 50E, UN 3480, IEC 62619, IEC 63056
Warranty	5 Years

Container Orientation



Line Diagram



*Performance under conditions other than those stated may vary. Contact NeoVolta Power for project-specific evaluation. Can be customized for >2000m applications.
**Certification activities are currently underway. Certifications will be formally listed upon successful completion of third-party testing and evaluation.

DISCLAIMER The information provided herein is believed to be accurate as of the date of publication. Specifications are subject to change without notice; values are nominal and approximate, and actual performance depends on site conditions, installation and operation. This datasheet does not create any warranty. To the extent permitted by law, NeoVolta is not liable for errors or omissions in, or reliance on, this information.

NEOVOLTA