



NOVA ELECTRIC



STANDARD FEATURES

- Compact 19" Rack Mount Chassis
- Lightweight Design
- Input Active Power Factor Correction
- Smart Sleep Function
- 7" Color Touch Screen Display
- Configurable for Three Phase or Single Phase Operation

CONTACT

100 School Street,
Bergenfield, NJ 07621 USA

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NEDM Series 10-50 KW True Online COTS UPS



NEDM11-20K Front and Rear View - 2 Module UPS



NEDM11-30K Front and Rear View - 3 Module UPS

GENERAL OVERVIEW

Nova Electric's NEDM Series double conversion True Online UPS is fully convertible and can be ordered in freestanding or rack mount configurations. Two-bay model NEDM11-20K-120/208 utilizes up to two 2U NEPD-10K-120/208 UPS modules rated to 10 KW each, allowing 10 KW (single module) or 10 KW N+1 (two module) operation. Three-bay model NEDM11-30K-120/208 utilizes up to three 2U NEPD-10K-120/208 UPS modules rated to 10 KW each, allowing 10 KW (single module) or 30 KW N+1 operation. Five-bay model NEDM11-50K-120/208 utilizes up to five 2U NEPD-10K-120/208 UPS modules rated to 10 KW each, allowing 10 KW (single module) or 50 KW N+1 operation.

The fully convertible design allows this UPS to be configured as follows:

- 1) Three phase input and output
- 2) Single phase input and output
- 3) Three Phase input and single phase output (with derating to 60%)
- 4) Single phase input and three phase output (with derating to 60%)

This UPS offers many advanced features including input active power factor correction, Smart Sleep function, Self Aging mode, and a 6.75" color touch screen interface.

The Leader In Rugged Power Conversion Technology Since 1966

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Typical Applications Include:

- Internet Data Centers
- Utility Applications
- Network Servers and Work Stations
- Control Systems
- Communication Systems
- Office Applications
- Rugged Industrial Applications

Please note: For 19" rack mount configuration, mounting rails should be used above and below the UPS chassis for proper support. The 19" rack mount battery drawers must be mounted with slide rails.

Modular 19" Compact Rack Mount Design

High Power Density –
10 KW in 2U Height

Smart Sleep Function
shuts down power
modules to increase loading,
achieving higher efficiency

UPS can be converted
to 19" rack mount and
integrated into the same
cabinet as the PDU, battery
drawers, and external
maintenance bypass
for smaller overall
system dimensions



6 ³/₄" Color LCD Touch Screen

Intelligent Charging Management to increase battery life



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SPECIFICATIONS

MODEL	NEDM11-50K-120/208	NEDM11-30K-120/208	NEDM11-20K-120/208
CAPACITY	50kVA/50kW <small>(Note: When configured for three-phase input / single-phase output, or single-phase input / three phase output, derate power to 60% of nominal.)</small>	30kVA/30kW <small>(Note: When configured for three-phase input / single-phase output, or single-phase input / three phase output, derate power to 60% of nominal.)</small>	20kVA/20kW <small>(Note: When configured for three-phase input / single-phase output, or single-phase input / three phase output, derate power to 60% of nominal.)</small>
COTS POWER MODULE RATED 10 kW / 10 kVA	Up to 5 Modules NEPDX-10K-120/208	Up to 3 Modules NEPDX-10K-120/208	Up to 2 Modules NEPDX-10K-120/208
INPUT			
NOMINAL INPUT	3 Phase + Neutral + Ground Nominal (120/208 VAC)		
VOLTAGE RANGE	188~260VAC (Line-Line), full load; 125V~187VAC (Line-Line), load derated linearly		
FREQUENCY RANGE	50/60 Nominal (40Hz-70Hz Range)		
POWER FACTOR	>0.99		
THDi	THDi<4% @ 100% linear load		
OUTPUT			
VOLTAGE	120/208 VAC		
VOLTAGE REGULATION	±1% for balance load; ±1.5% for unbalance load		
POWER FACTOR	0.8 Lead to 0.8 Lag		
THD-V	THD<1% (linear load), THD<5.5% (non-linear load)		
LOAD CREST FACTOR	Up to 3:1		
OVERLOAD CAPABILITY	110% for 10 min; 125% for 1 min; 150% for 30 s; >150% for 200ms		
BATTERY			
VOLTAGE	240 VDC with Centertap		
CHARGE POWER	20% of System kW Rating		
CHARGE VOLTAGE PRECISION	±1%		
SYSTEM			
SYSTEM EFFICIENCY	Normal mode: 93%; ECO mode: 98%; Battery mode: 92.5%		
DISPLAY	6.75" color touch screen LCD + LED + Keyboard		
IP CLASS	IP20		
INTERFACE	Standard: RS232, RS485, Dry contacts; Optional: SNMP card		
OPERATION STORAGE TEMPERATURE	0-40°C/- 40-70°C		
RELATIVE HUMIDITY	0-95% (non-condensing)		
NOISE	58dB @ full load, 52dB @ 45% load (1 meter away)		
PHYSICAL WEIGHT (lbs / kg)			
CABINET	187 / 85	114.2 / 52	92.4 / 42
POWER MODULE	35.2 / 16		
PHYSICAL DIMENSIONS (W*D*H) (in/ mm)			
CABINET	19 x 29.6 x 40.7 in 485 x 751 x 1033 mm (23U)	19 x 29.6 x 22.6 in 485 x 751 x 575 mm - (13U)	19 x 27.4 x 15.7 in 485 x 697 x 398mm - (7U)
POWER MODULE	17.2 x 23.2 x 3.4 in / 436 x 590 x 85mm - (2U)		

*Specifications subject to change.



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SPECIFICATIONS (CONT.)

AVAILABLE BATTERY RUN TIME FOR UP TO SEVEN 3U TALL HIGH RATE BATTERY DRAWERS							
BACK UP TIME (MINUTES)	POWER CAPACITY IN KW PER NUMBER OF BATTERY DRAWERS*						
	1	2	3	4	5	6	7
2	10.3	20.6	30.9	41.2	~	~	~
4	7.7	15.4	23.1	30.8	38.5	46.2	~
6	6.3	12.6	18.9	25.2	31.5	37.8	44.1
8	5.3	10.6	15.9	21.2	26.5	31.8	37.1
10	4.7	9.4	14.1	18.8	23.5	28.2	32.9
15	3.5	7	10.5	14	17.5	21	24.5
20	2.9	5.8	8.7	11.6	14.5	17.4	20.3
30	2.1	4.2	6.3	8.4	10.5	12.6	14.7
60	1.2	2.4	3.6	4.8	6	7.2	8.4
90	0.9	1.8	2.7	3.6	4.5	5.4	6.3

*** THE KW RATING MUST NOT EXCEED THE RATING FOR THE NUMBER OF POPULATED 10 KW MODULES IN THE SYSTEM**



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CUSTOM CHASSIS AVAILABLE – CONSULT FACTORY FOR DETAILS



Optional Stainless Steel UPS Cabinet



Optional Stainless Steel UPS and Battery Cabinets

NEDM-Series UPS In Rugged Cabinets For Harsh Environment Applications



NEDM Three-Phase 20 kVA UPS with Galvanic Isolation Transformer (est. 251 Lbs.)



Battery Cabinet with 5 VRLA Battery Drawers and Protective Circuit Breakers (est. 944 Lbs.)



20 KVA THREE PHASE UPS WITH 2 BATTERY DRAWERS AND I/O CIRCUIT BREAKER PANEL

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RUGGED AC POWER SYSTEMS



SELECT UNITS QUALIFIED TO MIL-STD-810, MIL-S-901, MIL-STD-1399, MIL-STD-461, MIL-STD-167, MIL-STD-740, RTCA/DO-160, AND MORE

RUGGED TRUE ONLINE UPS



500 W – 500+ KW

Rack Mount, Bulkhead Mount, and Freestanding

Single and Three Phase

50, 60, and 400 Hz.

PURE SINEWAVE DC-AC INVERTERS



100 W – 500+ KW

Rack Mount, Bulkhead Mount, and Freestanding

Single and Three Phase

50, 60, and 400 Hz.

SOLID-STATE FREQUENCY CONVERTERS



100 W – 500+ KW

Rack Mount, Bulkhead Mount, and Freestanding

Single and Three Phase

50, 60, and 400 Hz.

POWER DISTRIBUTION UNITS (PDUs)



Basic, Switched, Auto-Transfer Switching, and Metered Configurations

Rack Mount, Bulkhead Mount, and Freestanding

Single and Three Phase

CUSTOM EMI FILTERS



For MIL-STD-461 Compliance

Rack Mount, Bulkhead Mount, and Freestanding

Single and Three Phase

RUGGED PORTABLE TRANSFORMERS



100 W – 500+ KW

Rack Mount, Bulkhead Mount, and Freestanding

Single and Three Phase

EXTERNAL MAINTENANCE BYPASS SWITCHES (MBSs)



Rack Mount, Bulkhead Mount, and Freestanding

Single and Three Phase

CUSTOM DESIGNS



Designed & Built to Spec

Integrated AC & DC Capabilities

Multiple Outputs

RELIABLE AC POWER WHEN AND WHERE YOU NEED IT SEVERE ENVIRONMENT PRODUCTS



- AIRBORNE
- SHIPBOARD
- MOBILE
- RACK MOUNT & FREESTANDING

- 50, 60, AND 400 Hz
- AIR & WATER COOLED
- SINGLE AND THREE PHASE
- LIGHTWEIGHT DESIGNS

