



**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

(201) 385-0500

[novaelectric.com](http://novaelectric.com)  
[info@novaelectric.com](mailto:info@novaelectric.com)



# 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**

Rev E-December-21-2023



## 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

(201) 385-0500

[novaelectric.com](http://novaelectric.com)  
[info@novaelectric.com](mailto:info@novaelectric.com)



### 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



## 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

(201) 385-0500

novaelectric.com  
info@novaelectric.com



### SPECIFICATIONS

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

\*Specifications subject to change.



**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

(201) 385-0500

[novaelectric.com](http://novaelectric.com)  
[info@novaelectric.com](mailto:info@novaelectric.com)



**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



*The Leader In Rugged Power Conversion Technology Since 1966*



# 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

