



**NOVA ELECTRIC**



## FEATURES

- Single-Phase, Two-Phase, And Three-Phase
- 50 Hz, 60Hz and 400Hz – Specialty Frequencies For Rail Applications Also Available
- Up To 100 Amp Loads And Higher
- AC-In / AC-Out, AC-In -/ DC-Out, DC-In / AC-Out, And DC-In / DC-Out
- Input And /Or Output Circuit Breakers
- Signal Conditioning With EMI / RFI Filters
- Surge Protection
- Various Status Indicators
- On / Off / EPO Control
- Remote Control And Daisy-Chain Capability With Optional SNMP Control
- NEMA, IEC, And MIL-SPEC Connectors
- Various Chassis Designs, Finishes, Handles
- Weatherproof / High-IP Protection Construction

## CONTACT

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# Rugged AC and DC Power Distribution Units (PDUs)



*Custom Multi-Output PDU With Advanced SNMP Control*

## GENERAL OVERVIEW

Nova Electric offers a full line of COTS and military grade Power Distribution Units (PDU) designed to manage power capacity and functionality for harsh environment applications. The same robust construction that characterizes our MIL-STD-810, MIL-S-901, and MIL-STD-167 Power Sources applies to our PDUs, which are also available with enhanced filtering to meet MIL-STD-461 and Tempest Grade requirements. Our PDU offerings feature a nearly unlimited selection of choices from chassis configurations (rack mount, freestanding, and bulkhead mount,) connector styles, switches, breakers, indicators, and more. We can use an existing baseline product, a modified version of an existing product, or a clean-sheet purpose-built product designed and manufactured to your exact specifications.

***The Leader In Rugged Power Conversion Technology Since 1966***

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## TYPICAL APPLICATIONS

- Military Shelters
- Tactical Systems
- Shipboard Power
- HMMWVs
- Mobile Systems
- Ground Support
- Aircraft
- Drones
- Industrial
- Commercial

**SPECIAL OUTPUTS** - Some applications have a single input available, but require multiple output voltages. Nova Electric offers such PDUs, most commonly with 120 VAC, single phase input and multiple 120 VAC single phase outputs plus multiple DC outputs (such as 28 VDC, 12 VDC, and 6 VDC) using internal power supplies.

## OPTIONAL COMPLIANCES

- MIL-STD-810
- MIL-STD-1275
- MIL-STD-461
- MIL-STD-167
- MIL-STD-704
- MIL-S-901



**CUSTOM OUTDOOR 80 KW PDU**



**5KW / 3U PDU**



**3KW / 2U PDU WITH  
TOUCH SCREEN CONTROL**



**1.3KW / 1U PDU**

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## PDU TYPES

*There are different categories of PDUs. Understanding the differences will help you select which options may apply to your application.*

### BASIC PDU

A basic PDU combines a single power input, a circuit breaker (or fuse,) and multiple power outlets in a single enclosure. While similar in function to an office power strip, Nova Electric's PDUs are made of high quality materials and components intended for long service in demanding military environments. They're most often (but not always) built as 19" rack-mount enclosures to power several electronic devices as part of a total system. Basic units will typically have NEMA, IEC, or MS type connectors, but can also feature a variety of specialized connectors for military and other harsh environments. Any number of signal, connector, indicator, and circuit options can enhance a basic unit's design.



*NOVA 4KW UPS with Basic PDU*

### SWITCHED PDU

These PDUs add the ability to switch individual or groups of outlets on and off to allow some power management. Switching may be accomplished through controls on the PDU or remotely through dry contacts or network communications. There may also be capability to delay the application of power after a switch is turned on. This allows controlled startup of equipment which may have high surge loads upon power up close to the limit of downstream circuit breakers.

### AUTO-TRANSFER SWITCHING PDU

These PDUs are designed to allow a primary and secondary power source to power the entire set of outlets. If the primary source power fails or goes out of tolerance, the secondary source is applied. This is accomplished using high-speed voltage sensing components so that power loss to the outlets is short enough that most equipment will not detect the power drop and remain fully operational during the power transfer. This is typically used for high-availability applications with redundant power systems.

### METERED PDU

A metered PDU incorporates the ability to display real-time current draw in Amps or Watts by incorporating either digital or analog indicators. This eliminates the guesswork of estimating whether the PDU has the capacity to connect more devices.



*Tempest-Compliant 1U PDU Front Panel*



*Tempest-Compliant 1U PDU Rear 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 (MBSSs)



*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

