

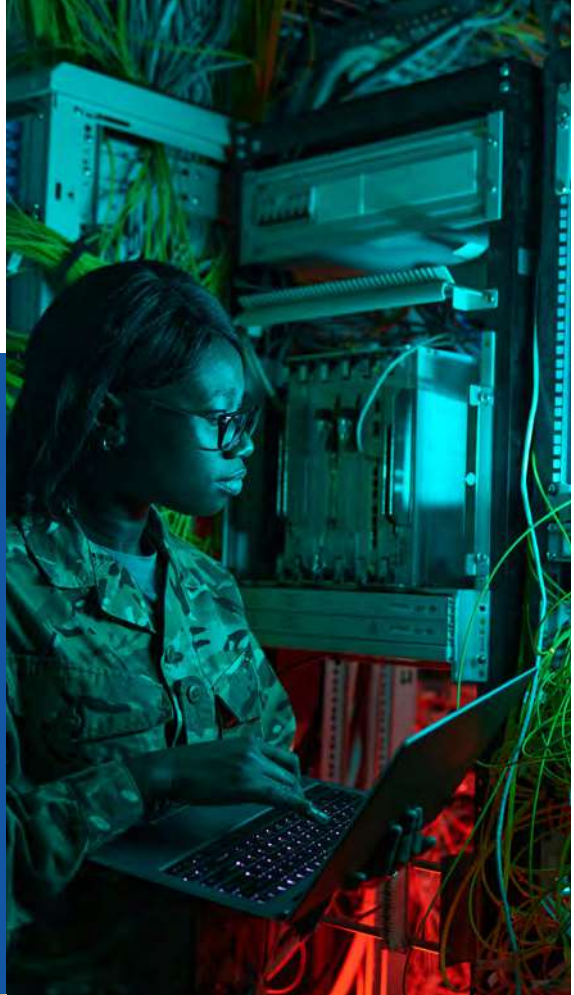


Rugged UPS Solutions For Military Applications

High-Quality Power Protection and Frequency Conversion Products



Founded in 1988, IntelliPower provides high-performance, rugged, and reliable power protection systems suitable for use in harsh environments. We develop tailored solutions thanks to our Engineering Team and manufacture in the USA according to our ISO 9001:2015 Quality System. Our installed base is present globally and supported by our service and sustainment team and network of international partners.



IntelliPower is a leading supplier of rugged UPS and power conversion units to the Defense Market. Built to comply with MIL-STDs, our wide portfolio of COTS units supports mission-critical C5ISR systems used shipboard, in UAV ground control stations, Armored Vehicles, Shelters, Radars, and Antennas. IntelliPower is a trusted partner to key programs such as Navy's CANES and Army's CHS.

IntelliPower Solutions for Your Mission-Critical Applications

Here at IntelliPower, we specialize in one thing—providing world-class, rugged power protection systems for extreme indoor and outdoor environments. We are a leader in this industry with our durable designs, advanced technology, and state-of-the-art features and functionalities that are incorporated into the largest product portfolio in this market.

IntelliPower: The Smart Choice



Field proven since 1988

Several thousands of our units support mission critical equipment globally



Designed and manufactured in the USA in our ISO 9001:2015 Certified Facility



Customization

We leverage our engineering and building blocks approach to develop and build solutions 100% compliant to our customers' specs



Rugged

Our units are built to meet most MIL-STDs and to operate in harsh environments



Supplier to DOD

IntelliPower is a key supplier for the US Department of Defense



Support C5ISR Systems

We provide back-up power to command, control, computers, communications, cyber, intelligence, surveillance, and reconnaissance systems



Service (PM/Repairs)

Our Service department supports customers through the lifetime of their equipment, repairing and refurbishing units and offering a battery replacement program



COTS

Our portfolio consists of Commercial off-the-Shelf (COTS) units

IntelliPower is a key supplier to the US DoD and its military Services: Army, Navy, Marine, Air Force, and Coast Guard

The uninterruptible power supply (UPS) supplier to the US Army's core programs, including: Win-T, DJC2, Trojan Systems, and MC4 Common Hardware Systems (CHS), Deployable Joint Command & Control (DJC2), and Patriot Surface-to-Air Missile (SAM)

The uninterruptible power supply (UPS) supplier to the US Marine Corps' TDN DDS-M program; US Navy CANES, SEWIP, LCS, and MQ-4C Triton programs; and US Coast Guard's Polar Security Cutter (PSC) and Offshore Patrol Cutter (OPC) programs

The uninterruptible power supply (UPS) supplier to Foreign Military Sales (FMS) programs, including: Halifax Frigate (CAN), Next Generation Frigate (CAN), and Anzac-class frigate (ANZ)

Product Portfolio



Uninterruptible Power Supplies (UPS)

Online Double Conversion UPS solutions offer flexible features, modular configurability, hot-swap batteries, and cost-effective customization.



Voltage Frequency Converters

Supports the need to convert AC input voltages and frequencies to different output voltages and frequencies. Also supports the conversion of DC to AC and AC to DC.



External Battery Modules (EBM)

EBMs provide extended battery run times for UPS systems with internal batteries. They also support battery run time for UPS power modules that do not include internal batteries.



Power Conditioners

All the features and benefits of a UPS aside from battery backup. When lower weight and/or lower cost may be required by your specifications, consider a power conditioner.



Power Distribution Units (PDU)

PDUs distribute output power. Each output receptacle has its own combined On/Off switch and magnetic hydraulic circuit breaker with flip-top covers to avoid accidental operation of switches.



External Battery Chargers

High-current-rated external battery chargers may be employed in situations requiring a more powerful charger than is available in the UPS. Examples include large EBMs and/or for large quantities of smaller batteries connected in parallel.

Online Double Conversion UPS Features

At the beginning and end of every day, our mission is to solve your most challenging backup power issues, thereby making your job easier.

Every feature in our double conversion UPS systems is designed and constructed to provide the ultimate protection for your valuable electronic equipment. All our systems are designed and manufactured in the USA, so you know you will get the support and personalized service that is essential to maintaining your mission-critical applications. Some examples of our top competitive advantages and capabilities are illustrated below.

Customized Solutions



In-house Design Team



Build to Spec



Form/Fit/Function (FFF) Drop-in Replacement



Modular Building Blocks

Power Conditioning

Filters and conditions the AC line to support industrial and commercial transient and emissions standards.

Safe Shutdown and Communications Software Options

- ▶ Windows, Linux, UNIX, macOS and FreeBSD
- ▶ Microsoft Hyper-V, VMware ESX and VMware ESXi Virtualization Software
- ▶ SNMP, Ethernet/IP, CIP, RS232/USB and Dry Contacts

Battery Chemistries

- ▶ Pure Lead Acid
- ▶ Valve-Regulated Lead Acid (VRLA)
- ▶ Lithium Iron Phosphate (LiFePO₄)

Voltage and Frequency Conversion

Transforms multiple input voltages and frequencies to various output voltages and frequencies

Battery Options

- ▶ Internal
- ▶ External Battery Module (EBM)
- ▶ Hot Swappable Drawers



Special Functions

- ▶ Emergency Power Off
- ▶ Cold Start Button
- ▶ Remote Shut-Down
- ▶ And more

Multiple Inputs

- ▶ 120/240, 115/230, 90-264, 208, 440VAC
- ▶ 47-440 Hz
- ▶ Single or 3-Phase AC DC, DC/AC

Multiple Outputs

- ▶ 120/240, 115/230, 208 VAC
- ▶ Selectable or Fixed
- ▶ 50/60 Hz
- ▶ Single-Phase AC
- ▶ DC, DC/AC

Connector Options

- ▶ NEMA
- ▶ IEC
- ▶ Circular Mil
- ▶ Terminal Block
- ▶ Pigtail

Multiple Mounting Configuration and Enclosure Options

IntelliPower offers enclosures fabricated out of steel or aluminum (with powder coat finish as an option), ranging from 1U up to 6U for rack-mount, including half rack units for applications with limited space width available.

Among the existing mounting configurations, IntelliPower has also wall/bulkhead mount, vertical freestanding towers (also with lifting eyes), transit cases, and portable briefcases. In addition to our extensive library of standard models, IntelliPower can quickly design new enclosures.



Half Rack



1U Rack Mountable



2U Rack Mountable



3U Rack Mountable



4U Rack Mountable



6U Rack Mountable



< 50 lb. Portable Briefcases



Transit Cases



Vertical/Free Standing



Wall or Bulkhead Mountable



Free Standing Towers with Lifting Eyes

System Capabilities and Battery Chemistry Options

System Capabilities

Our portfolio is designed and built to operate in critical environments and harsh conditions, such as outdoor applications (rain, humidity, fungus, salt fog, and blowing sand/dust), poor power quality from generators and other power sources, extreme high and low temperatures (-40°C to +65°C), and high vibration and shock.

- ▶ Rating IP65 - Sealed and waterproof
- ▶ Military Standards (MIL-STD):
 - **MIL-STD-810:** Equipment withstands environmental stresses from low pressure (altitude), temperature, humidity, sand/dust, vibration, shock, and more
 - **MIL-STD-167-1:** Shipboard equipment withstands vibrations from environment
 - **MIL-DTL-901:** Shipboard equipment withstands high-impact shock testing
 - **MIL-STD-1399/300:** AC low voltage shipboard equipment's compatibility with shipboard electrical power systems
 - **MIL-STD-461:** Equipment's electromagnetic emissions and susceptibility, conducted or emitted, are acceptable for various military applications
 - **MIL-STD-464:** Equipment's electromagnetic compatibility with itself and the system it is installed on, and ability to withstand environmental electromagnetic stresses
 - **MIL-STD-704:** Equipment is compatible with aircraft electrical power systems
 - **MIL-STD-1275:** Equipment meets requirements for 28 VDC electrical power on military ground vehicles
- ▶ CE certification
 - **EN62040-1:** Equipment meets EU requirements for UPS safety
 - **EN62040-2:** Equipment meets EU requirements for UPS electromagnetic compatibility



Battery Chemistry Options

Lithium Iron Phosphate

- ▶ Temperature range: -40°C to 60°C
- ▶ Very lightweight: 1/3 the weight of lead acid batteries
- ▶ Delivers approximately 2 to 2.5 times the backup run time for equal physical size
- ▶ Delivers up to 10 or more times the discharge-charge cycles vs. lead acid
- ▶ Retains up to 8 times the capacity after 12 months storage at 20°C to 60°C
- ▶ Lowest lifetime cost at any temperature up to 60°C
- ▶ Excellent safety performance: contains nontoxic materials and does not experience thermal runaway

Valve-Regulated Lead Acid

- ▶ Temperature range: -20°C to +50°C
- ▶ Low cost: inexpensive compared to other batteries
- ▶ Durable and dependable service
- ▶ Unrestricted transport - DOT approved for all land, sea, and air transport
- ▶ Mature, reliable, well-understood technology

	Chemistry	Energy Density	Cycle Life	Shelf-Life	Self-Discharge Rate	Efficiency	Energy Density	Total Cost of Ownership	Depth of Discharge (DoD)	Environmental Impact	Safety
LFP Battery	Lithium Iron Phosphate	High	High (2000-5000 cycles)	High	Low	High	High	Better	High (90%)	Environmentally friendly	Safer, lower risk of fire
VRLA Battery	Lead-Acid	Low	Low (300-700 cycles)	Low	High	Low	Low	Good	Low (~50-80%)	Contains lead, less green	Moderate safety concerns

Service Offerings

Evaluation

Our evaluation process includes the following steps:

1. We will inspect the unit and identify the problem
2. We will assess the severity of the problem and the cost of repair
3. We will provide you with a formal quote for the repair

If we advise you not to proceed with the repair, the quoted price will remain unchanged. However, if we recommend the repair and you choose to move forward, the cost of the evaluation will be included in the overall repair cost.

Here are some additional details about our evaluation process:

- ▶ Our evaluations are conducted by highly skilled and experienced technicians.
- ▶ We use state-of-the-art equipment to accurately diagnose the problem.
- ▶ We provide you with a clear and concise quote for the repair.

We are confident that our evaluation process will give you the information you need to make an informed decision about the repair of your unit. Contact us today to schedule an evaluation.

Refurbishment

Our refurbishment service includes the following:

- ▶ Replacement of broken, damaged, or worn parts
- ▶ Upgrade to new revisions when available
- ▶ Restoration of the assembly to meet the original factory performance requirements
- ▶ Meticulous cleaning of all finishes
- ▶ Provision of a one-year product warranty

We use only high-quality parts and materials, and our technicians are highly skilled and experienced. We are confident that our refurbishment service will return your equipment to its original condition and performance.

If you are considering refurbishing your equipment, please contact us today at service.intellipower@ametek.com to discuss your needs. We would be happy to provide you with a free quote and answer any questions you may have.

Standard Repair

Our standard repair service includes the following:

- ▶ Reconditioning or replacement of broken, damaged, or failed parts
- ▶ Restoration of a component or assembly to meet the original factory performance requirements
- ▶ Exclusion of chassis damage or rusting
- ▶ Provision of a 6-month warranty specifically for replaced parts

We use only high-quality parts and materials, and our technicians are highly skilled and experienced. We are confident that our standard repair service will return your component or assembly to its original condition and performance.

Benefits of Standard Repair

Standard repair offers several benefits over purchasing a new component or assembly, including:

- ▶ **Cost savings:** Standard repair is typically much less expensive than purchasing a new component or assembly
- ▶ **Environmental benefits:** Standard repair reduces the need to manufacture new components or assemblies, which has a positive impact on the environment
- ▶ **Warranty:** We provide a 6-month warranty on all replaced parts, which gives you peace of mind knowing that your component or assembly is covered

If you are considering having your component or assembly repaired, please contact us today to discuss your needs. We would be happy to provide you with a free quote and answer any questions you may have.



Phone: +1 714-921-1580 • Fax: +1 714-921-4023 • sales.intellipower@ametek.com

Corporate Headquarters

1746 North Saint Thomas Circle, Orange, CA 92865 USA

www.IntelliPower.com



All products are designed, manufactured, and supported in the USA

ISO 9001:2015 Certified Facility | Military Standards