

The Power to Move Your Workplace



PORTABLE POWER SUPPLY COMPARISON GUIDE

For Warehouses, Manufacturing and Distribution Centers



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1. ABOUT THIS GUIDE

You may be well aware of advances in technology which have already changed how warehouses, manufacturing plants, distribution centers and large retail stores operate.

Research and comparisons are important prior to making purchasing decisions. When time is short, serious research is often put off which causes decisions to be delayed.

To help you to avoid delays and save time, we are providing our research on portable power supply options. This guide is not designed to be technical, though it provides a few technical specs. We have portable power supply geeks on the team who can't help but share what they know.

This guide will first consider who might benefit and how the comparisons were chosen. We have created a table of portable power supply

"GEEKS ARE PEOPLE
WHO LOVE SOMETHING
SO MUCH THAT ALL THE
DETAILS MATTER"

- MARISSA MEYER - YAHOO.COM

options which is not an all inclusive list but can still save you hours of research.

Following the comparison tables, you will find a glossary of terms and descriptions to help you understand various types of equipment.

Our mission at Newcastle Systems is to provide the best portable power supply options and methods for improving efficiencies and profits in the industry.

We're available to answer your questions via e-mail at customerservice@newcastlesys.com or by phone: 781-935-3450. You may also find indepth product information, case studies, white papers and more on our website at www.newcastlesys.com









As you review the guide, you may be pleasantly surprised and inspired by new ideas.

Please reach out to us via e-mail, social media or a phone call. Share with us



your thoughts and ideas so that we may have the opportunity to better meet your needs.

We are first and foremost a manufacturing company with an obsession for customer service and rely heavily on you for information about what matters.

2. WHO WILL BENEFIT

At the hub of every organization are decision makers. There is no hard rule as to which roles they play. A key manager who works with their team on the warehouse floor may be held responsible for productivity results. This guide is for them.

This guide is for anyone leading a team which is wasting time and money walking back and forth.

This is a guide for the CEO who finds it difficult to get an answer from his hard working team because they have not kept up with new technology.



For the CFO who is required to report on profitability line by line, this is for you. Portable power supplies will have others referring to you as a genius.

3. HOW WE COMPARED PORTABLE POWER SUPPLIES

Portable power supplies are known by many names and can be used anywhere power is needed, such as curb side to power sidewalk sales, mountainside to power professional photo sessions or inside to power various warehouse functions. The priority in our research was to think "portable". A portable power supply is movable whether it be with handles, wheels or a cart.



ACCESS THE CASE STUDY LIBRARY

We broadened the search to include short term back-up supplies, emergency power and portable power supplies perfect for warehouse operations or order picking carts.

Our search was performed with your perspective in mind - that of a customer and decision maker. The objective is to provide information you can confirm, which included the Internet, company databases and traditional phone books. With a little digging and persistence, we uncovered the treasures of portable power.

In the comparison table, you may see a blank or an "unknown". In most cases, we did not find the data essential to operations. Included are two of Newcastle Systems' popular portable power systems. The new Ultra Series is lighter and smaller for those very tight spaces.



QUIET, CORDLESS AC POWER - ANYWHERE YOU NEED IT! CHECK IT OUT



4. THE COMPARISON TABLES - GROUP 1

| Company | Newcastle Systems | Jaco Inc. | Uptime Business Products | Nature Power | Xantrex |
|---------------------|--------------------------|----------------------------|--|---|--|
| Model | PowerPack Mega Series | L500 Power System | <u>Lithium Secondary</u> <u>Battery</u> | Solar Home & RV Portable Backup Power Kit | Xantrex XPower Portable Powerpack 1500 |
| lmage | | 96 1 99 | | ***** | |
| Approx. Run-Time | 12+ hrs | 12.5 hrs @ 40 Watt Load | 10 to 15 hrs | 90 hrs Back-up | 9 hrs to 27 hrs |
| Approx. Charge Time | 3 to 5 hrs | 4 hrs | 6 to 7 hrs | 12 to 24 hrs | 24 hrs |
| Number of Outlets | 6 | 4 | 4 | 4 | 2 |
| AC Volts | 115 Volts AC | 120 Volts AC | | 120 Volts AC | 120 Volts AC |
| Watts | 1,000 | 250 | 300 | 1,400 | 1,500 |









| Company | Newcastle Systems | Jaco Inc. | Uptime Business Products | Nature Power | Xantrex |
|-------------------|--|------------------------|--|---|--|
| Model | PowerPack Mega Series | L500 Power System | <u>Lithium Secondary</u> <u>Battery</u> | Solar Home & RV Portable Backup Power Kit | Xantrex XPower Portable Powerpack 1500 |
| Image | | 56 l 59 | | 7728 | |
| Typical Use | Desktop PC, Large Printer, Laptops, Any Industry | Medical Carts | Laptops, Mobile Devices | Home Electronics | Home Electronics |
| Approximate Price | \$1,995.00 | Unavailable | Unavailable | \$999.99 | \$650.00 |
| Requires Fuel | No | No | No | No | No |
| Battery | 100 Ah | Unknown | Unknown | 60Ah | 60 Ah |
| # of Batteries | 2 | 1 | Unknown | 1 | 1 |
| Туре | Sealed Lead Acid | Lithium Iron Phosphate | Lithium Ion | Sealed Lead Acid | Sealed Lead Acid |
| Inverter/Charger | Yes | No | No | Yes | Yes |
| Wave Form Output | Modified Sine Wave | AC Sine Wave | Unknown | Modified Sine Wave | Modified Sine Wave |
| DC Power output | | 50 volts DC | 5V (USB), 12V, 16V, 19V, 24V | | 12 |
| USB Outputs | No | No | Yes | No | No |
| A/C Frequency | 60 Hz | Unknown | Unknown | Unknown | 60 Hz |
| Smart Charger | Yes | Separate Unit | | Yes | Yes |

| Company | Newcastle Systems | Jaco Inc. | Uptime Business Products | Nature Power | Xantrex |
|--|--------------------------|---------------------|--|---|--|
| Model | PowerPack Mega Series | L500 Power System | <u>Lithium Secondary</u> <u>Battery</u> | Solar Home & RV Portable Backup Power Kit | Xantrex XPower Portable Powerpack 1500 |
| lmage | | 95 59 | | 2000 PRES | |
| Charging Amps | 20 Amps | Unknown | Unknown | 5 Amps | 5 Amps |
| Automatic Charger Shut-off | Yes | Unknown | Unknown | Unknown | Yes |
| UL Approved | Yes | Yes | | | Yes |
| CSA Approved | Yes | | | | Yes |
| Approx. Weight | 160 lbs | 5.5 lbs Per Battery | 6 lbs Per Battery | 83 lbs | 60 lbs |
| Dimensions LxWxH | 20" x 21" x 14" | | 10.63" x 7.09" x 1.57" | 19 1/2" x 15 3/4" x 19" | 15.8" x 11.9" x 14.8" |
| Indoor | Yes | Yes | Yes | Yes | Yes |
| Outdoor | Yes, Under Cover | No | No | Yes, Under Cover | Yes, Under Cover |
| Digital Meter | Yes | Yes | | | |
| LED Displays | Yes | Yes | Yes | Yes | Yes |
| Battery Status Meter | Yes | Yes | Yes | Yes | Yes |
| Power Source Confirmation Indicator | Yes | Yes | Yes | | |
| Visual Low Voltage Alert | Yes | Yes | Yes | | Yes |
| Audio Low Voltage Alert | Yes | | Yes | | Yes |
| Integrated Handle(s) | Yes | Yes | No | No | Yes |









| Company | Newcastle Systems | Jaco Inc. | Uptime Business Products | Nature Power | Xantrex |
|---|--------------------------|-------------------|--|---|--|
| Model | PowerPack Mega Series | L500 Power System | <u>Lithium Secondary</u> <u>Battery</u> | Solar Home & RV Portable Backup Power Kit | Xantrex XPower Portable Powerpack 1500 |
| Image | | 56 8 69 | | 7711 | |
| Optional Wheel-base Tote System | Yes | n/a | n/a | | Yes |
| Optional Bracket System to Secure Unit to a Cart, Vehicle, or Other Surfaces | Yes | | | | |
| Operating Temperature | 32 F to 120 F | | | | |
| Power input | 12 Volts | | | 12 Volts | 12 Volts |
| Warranty | 6 Months | 3 Year | 1 Year | Unknown | 1 Year |

5. THE COMPARISON TABLES - GROUP 2

| Company | Newcastle Systems | OES Optimized Energy Storage | Generac | Duracell | АРС |
|---------------------|---|---------------------------------------|----------------------------|------------------------------|------------------------------------|
| Model | <u>Lightweight PowerPack</u> <u>Ultra Series</u> | <u>Baby Genny</u> | iX800 Generator | 852-1807 Powersource 1800 | Smart-UPS® 2200VA & Serial 120V |
| lmage | The second second | wite | loss | | |
| Approx. Run-Time | 6 to 8 hrs | Emergency - Backup Power | 3.6 hrs | 1.5 to 4 hrs | 6.7 to 200 minutes |
| Approx. Charge Time | 6 hrs | 3.5 hrs | n/a | 12 hrs | 3 hrs |
| Number of Outlets | 1 | 2 | 2 | 5 | 10 |
| AC Volts | 115 Volts AC | 115 Volts AC | 120 Volts AC | 120 Volts AC | 120 Volts AC |
| Watts | 150 | 160 | 800 | 1440 | 1980 |
| Typical Use | Laptop, Small Barcode Printer, Any Industry | Emergency - Backup Power | Back-up Home Appliances | Emergency Power | Emergency Back-up Office |
| Approximate Price | \$399.00 | \$1,295.00 | \$378.90 | \$469.99 | \$796.99 |
| Requires Fuel | No | No | Yes | No | No |
| Battery | 18 Ah | Unknown | 0 | 17 Ah | Unknown |
| # of batteries | 1 | 1 | None - Gas Operated | 3 | Unknown |
| Туре | Sealed Lead Acid | Lithium Ferrous Phosphate | Gas Generator | AGM Sealed Lead Acid | Sealed Lead-Acid |









| Company | Newcastle Systems | OES Optimized Energy Storage | Generac | Duracell | APC |
|-------------------------------|---|---------------------------------------|-----------------|------------------------------|------------------------------------|
| Model | <u>Lightweight PowerPack</u> <u>Ultra Series</u> | <u>Baby Genny</u> | iX800 Generator | 852-1807 Powersource 1800 | Smart-UPS® 2200VA & Serial 120V |
| lmage | | with the second | | | |
| Inverter/Charger | Yes | Yes | Yes | Yes | No |
| Wave Form Output | Modified Sine Wave | Unknown | Unknown | Sine Wave | Sine wave |
| DC Power output | | 12 | | | |
| USB Outputs | No | Yes | No | No | No |
| A/C Frequency | 60 Hz | Unknown | 60 Hz | 60 Hz | 57 - 63 Hz |
| Smart Charger | Yes | | | | |
| Charging Amps | Unknown | Unknown | Unknown | Unknown | Unknown |
| Automatic Charger Shut-off | | Unknown | Yes | Unknown | Yes |
| UL Approved | Yes | Yes | | | Yes |
| CSA Approved | Yes | | | | Yes |
| Approx. Weight | 24 lbs | 5.5 lbs | 29 lbs | 58.2 lbs | 112 lbs |
| Dimensions LxWxH | 10" x 9" x 8.75" | 8.8" x 4" x 7.2" | 18" x 10" x 15" | 19" x 28" x 10 5/16" | 21.4" x 7.72" x 17" |
| Indoor | Yes | Yes | No | Yes | |

| Company | Newcastle Systems | OES Optimized Energy Storage | Generac | Duracell | APC |
|---|---|---------------------------------------|-----------------|------------------------------|------------------------------------|
| Model | <u>Lightweight PowerPack</u> <u>Ultra Series</u> | <u>Baby Genny</u> | iX800 Generator | 852-1807 Powersource 1800 | Smart-UPS® 2200VA & Serial 120V |
| lmage | | wite. | | | |
| Outdoor | Yes, Under Cover | Yes | Yes | No | |
| Digital Meter | Yes | | | | |
| LED Displays | Yes | Yes | Yes | Yes | Yes |
| Battery Status Meter | Yes | | | Yes | Yes |
| Power Source Confirmation Indicator | | | | Yes | Yes |
| Visual Low Voltage Alert | | | | Yes | Yes |
| Audio Low Voltage Alert | | | n/a | Yes | Yes |
| Integrated Handle(s) | Yes | | Yes | | |
| Optional Wheel-base Tote System | | | | | |
| Optional Bracket System to Secure Unit to a Cart, Vehicle, or Other Surfaces | | | | | |
| Operating Temperature | | | | 32 F to 104 F | 32 F to 104 F |
| Power Input | 12 volts | 12 volts | | 12 volts | 120 volts |
| Warranty | 6 months | Unknown | 2 year | 1 year | 2 years |









THE POWER TO MOVE YOUR WORKPLACE



ABOUT NEWCASTLE SYSTEMS

Newcastle Systems is committed to providing innovative solutions that help make Auto-ID technology and other hardware truly mobile and information more readily available across an entire enterprise.

Loss of productivity and inefficiencies such as wasted steps to the printer on a fixed desk, inaccurate inventory counts, improper labeling, time delays, manual processing and incorrect shipments are just some of the challenges that are alleviated with a mobile powered workstation.