

Powered Process Improvement



PRODUCT OVERVIEW



POWERED PROCESS IMPROVEMENT

Converting a stationary workplace to a mobile one is the easiest, most economical way to increase productivity of your current workers and infrastructure. Our Mobile Workplace and Portable Power Systems let you take your workstations wherever they are needed.



Increasing Productivity

Our Mobile Workplace System means you can process the same transactions with fewer pieces of equipment (i.e. printers, computers, etc.) by converting to mobile workstations.

Instant Gratification

Quickly obtain measurable productivity gains without months of planning and implementation. Workstations are delivered and can be on the floor the same day.

Improving Processes

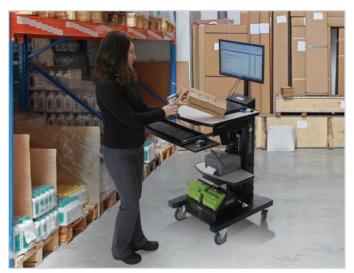
The Portable Power System allows you to fully leverage your wireless facility by cutting the power cords and letting your workstations move to where they are needed - with your people.

Enabling People

Operators and managers now have access to data and real-time information anywhere in the facility because they can take their workstation with them.

No Additional Purchases

Mobile workstations easily integrate with your existing hardware and software systems, eliminating the need for additional investment or equipment purchases.





OUR CUSTOMERS

Newcastle Systems is proud to be associated with some of the biggest names in the warehousing and distribution, manufacturing and retail business sectors.

- Amazon.com
- Cardinal Health
- Caterpillar
- HomeGoods
- Macys
- Mercedes Benz
- MSC Industrial Supply
- Raytheon

- Ross Stores
- Schlumberger
- Staples
- Tesla
- The Home Depot
- ThermoFisher
- UPS Supply Chain Solutions

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"They are the best thing I have ever placed into a warehouse for productivity, flexibility, and function!!!."

Joe H., Parts Logistics Manager Mercedes Benz

YOUR BUSINESS

With thousands of installations worldwide, our Mobile Workplace and Portable Power Systems have proven to increase productivity in a wide variety of workplaces. The most popular workplaces include:

Business Sector

Common Applications



Warehouses/Distribution Centers

Maximizing supply chain efficiencies are on-going goals of progressive organizations. Mobile workstations deployed in a wireless facility can help support ERP and WMS systems to achieve optimal productivity.

- Incoming inspection and labeling
- Inventory control/cycle counting
- Order fulfillment and picking
- Outbound labeling
- Cross-docking

Manufacturing Facilities



Mobile workstations support lean manufacturing principles that require greater operational flexibility. They excel in a manufacturing environment for tasks such as:

- Quality control/assurance
- Lot and batch traceability
- Mobile supervisor station
- Visual work instruction
- Material replenishment
- Finished goods labeling and much more

Retail Floors



Performing tasks at the point of activity saves time, improves accuracy and keeps sales personnel on the floor, ready to help your customers.

- Shelf labeling, tag and sign printing
- Inventory management
- Line busting
- Mobile POS "point of sale" station
- Portable power for garden centers, sidewalk sales, concerts and more

Other Workplaces



Mobile Powered Workstations are proven productivity solutions in other workplaces such as: • health care • education • government agencies and many

- Health care: Mobile patient charting
- Education: Portable power for AV equipment, mobile registration or orientation
- Government: Mobile station for explosive detection equipment (TSA)



MOBILE WORKPLACE SYSTEMS

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





MOBILE WORKSTATION KEY BENEFITS

- Eliminate costly footsteps
- Print on-demand and reduce costly mislabeling errors
- Continuous full screen access to real-time information
- See your ROI in about 4-6 months

The full line of wireless workstations with integrated power supplies are designed to transport and power high-volume barcode printers, laptops, PCs, scales, dimensioning stations and other electronic equipment for 8 - 12+ hours at a time, or 24/7 operation

Create Your Own Mobile Station

An on-demand label printing / PC station provides a simple way to implement mobility in your facility.

A popular configuration consists of:

- 1 Your high-volume label printer
- 2 Your iPad, laptop or PC/LCD with WMS, ERP, MES, etc.
- 3 A mobile powered workstation

Eliminate costly footsteps, improve accuracy and increase productivity immediately!



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NB and PC Series come standard with (one) adjustable shelf, locking casters, push handles, waste basket and holder, integrated power system, built-in power strip and cord reel holder (SLA version).

EC Series come standard with top shelf, locking casters, push handles, waste basket and holder, integrated power system, power strip and cord reel holder (SLA version).

Ту



EC Series	
Entry-Level Unit	



NB Series Mid-Range Unit



PC Series Heavy-Duty Unit

Ideal	Workplace
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Manufacturing	
pical Hardware Powered	Laptop or tablet, scanner, small printer for 8+ hrs.

Laptop or tablet, scanner, high-volume printer for 8-12+ hrs.

PC and monitor, scanner, highvolume printer (including laser printer) for 8-12+ hrs.

Battery	
Power Swap Compatible	

Retail Floor

Warehouse/DC

Swappable LiFePO4 230 WH or 480 or 1200 WH Yes, enables 24 hour power with lithium power system

Hot swappable LiFePO4 460/920 WH or 1200 or 2400 WH Yes, enables 24 hour power with SLA or lithium power system

Hot swappable LiFePO4 460/920 WH or 1200, 2400 or 3600 WH

Footprint

20 x 21.75 x 43"

70-140 lbs.

newcastlesys.com/ecseries

26 x 24 x 42" NB Series

newcastlesys.com/nbseries

Yes, enables 24 hour power with lithium power system

35.5 x 26 x 43" (30" shelf) 53.5 x 26 x 43" (48" shelf)

 $(L \times W \times H)$ Weight

26 x 18 x 42" NB Series SLIM 150-265 lbs.

198-385+ lbs. newcastlesys.com/pcseries







NEW! QC Series **Quality Testing Unit**



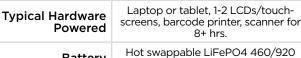
NEW! LT Series Laptop Unit Available Q2, 2020

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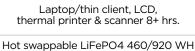
Manufacturing

Warehouse/DC

Retail Floor







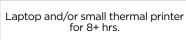
or 480 or 1200 WH

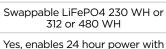
Yes, enables 24 hour power with

lithium power system

29 x 22 x 42"







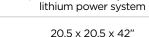


Battery

Weight

lithium power system 26 x 19 x 30 - 48" $(L \times W \times H)$

> 115-195 lbs. 97-167 lbs.



45-78 lbs.

newcastlesys.com/apex-series

WH or 1200 WH

Yes, enables 24 hour power with

newcastlesys.com/qcseries

newcastlesys.com/lt-series







newcastlesys.com/nucleus-mini

POWERSWAP NUCLEUS®

Lithium Power System

The PowerSwap Nucleus® Lithium Power System is designed to expand productivity into all spaces of the warehouse/DC, production floor and other industrial environments. These rugged, yet lightweight battery systems provide quiet, seamless AC power for 8+ hours at a time. Once the battery charge is depleted, simply swap it with a fully charged one in a matter of seconds enabling a 24/7 operation.

- Complete system consists of: 1 to 4 battery packs, power docking station and battery charging station
- Extremely robust: 5-7 year battery life or 3,000 cycles making it a great investment
- Fully swappable: In a matter of seconds so you'll never run out of battery power or forget to charge a cart
- Safe battery chemistry: Lithium Iron Phosphate

NEW! PowerSwap Nucleus® MINI

- Designed to power laptop, small thermal printer and scanner for 4-8 hrs.
- Each battery pack supports up to 230 WH and weighs only 6 lbs.
- Mounts to your own industrial cart, picking cart or Newcastle EC Series

PowerSwap Nucleus® CLASSIC

- Designed to power laptop/thin client, industrial barcode printer, scanner for 8+ hrs.
- Each battery pack supports up to 460 watt hours and weighs only 11 lbs
- Integrates with Newcastle NB, PC, Apex, and QC Series or your own cart



newcastlesys.com/powerswap-nucleus







newcastlesys.com/powerpack

POWERPACK SERIES

PowerPack Mega Series and PowerPack Ultra Series

The sturdy PowerPack Mega is ideal for powering computers, printers, POS systems, scales, testers and any other electronic hardware for 12+ hours, while the lightweight PowerPack Ultra Series is designed for smaller power requirements such as a laptop or small barcode printer. It is designed to run 6-8 hours on a charge.

- Quiet, seamless AC power where and when you need it
- Eliminate the need for noisy generators or extension cords
- At the end of shift or use, simply plug the unit into a standard wall outlet to recharge

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2020 Product Addendum



POWERSWAP NUCLEUS® MINI

Available NOW

Lithium Power System

- MINI... Yet Mighty. At only 6 lbs, this battery was designed to a power laptop/tablet, small thermal printer and scanner for 4-8 hrs.
- Fully Swappable: In a matter of seconds you'll never run out of battery power
- **Extreme Longevity:** 5-7 year battery life or 3,000 cycles
- Interchangeable: Designed to mount to your own industrial cart, picking cart or Newcastle EC Series Workstation



newcastlesys.com/ec102num

Available NOW EC102NUM

Mobile Powered Workstation

- Outstanding Value: Best price to performance for industrial workstation with integrated Powerswap Nucleus MINI lithium power system
- 24/7 Operation: Ideal for multiple shifts, phased shifts and more
- **ROI** in about 4 months





newcastlesys.com/fixed-lithium

FIXED LITHIUM (LiFePO4)

Available **NOW**

Battery Upgrade Kits

Upgrades available for standard NB Series & PC Series Workstations and PP Series Power Systems. Fits into your existing battery cabinet.

- 8 10 Year Battery Life: Connect it and forget it for years!
- Improved Worker Safety: Much easier to move on cart; less than 1/3 the weight of SLA batteries
- Power laser printers with fixed lithium batteries



New Products Coming Soon



LT SERIES LAPTOP CART

Launch Date June 2020

Launch Date

July 2020

Our most economical cart system designed for mobile computing and light printing applications for 4-8+ hrs.

- Typical ROI in < 3 months
- **Rugged Industrial Design**
- Power System to Fit Your Needs Swappable, lightweight lithium batteries for 24/7 operation or SLA for 8 hours of operation





newcastlesys.com/nu-view

Launch Date July 2020 NU-VIEW

Battery Monitoring System

- Monitor PowerSwap Nucleus® battery packs through web browser, smartphone, or tablet
- Display real-time & historical data in easy-to-read graphs including state of health, state of charge, cycle count, temperature, faults/warnings & more.
- **Reduce Costly Downtime**



newcastlesys.com/powerswap-nucleus

REDESIGNED POWERSWAP **NUCLEUS CLASSIC**

Lithium Power System

- **Sleeker look & lighter weight** 10 lbs lighter than the current unit
- More clearance Batteries positioned at 35° angle (vs. current 45°) to enable more shelf clearance on workstation
- **Integrated NU-VIEW Battery Monitoring System**

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ACCESSORIES

Newcastle Systems' growing line of modular accessories enables you to customize mobile powered workstations to suit your specific needs. Workstation accessories provide benefits such as increased ergonomics, organization, convenience, security and flexibility.

A sampling of the currently available accessories is pictured below. You can find the complete line of modular accessories at www.newcastlesys.com/accessories.



Lockable 3" Drawer for NB & PC Series



Binder Holder for NB & PC Series



Thin Client Holder for EC, NB, PC, Apex & QC Series



Desk Organizer for NB & PC Series



Scanner Holder for EC, NB, PC, Apex & QC Series



Label Holder for NB & PC Series



Keyboard Drawer for EC, NB, PC, Apex & QC Series



Safety Light for NB & PC Series



Slide-Out Printer Tray for EC, NB & PC Series



Small Printer Tray for NB & PC Series



Single & Dual Monitor Mount & 30" Pole for EC, NB, PC, Apex & QC Series



Folding Shelf for EC & PC Series

EASILY IDENTIFY HIDDEN CAUSES OF WASTE WITH OUR MOTIONMETER APP

MotionMeter by Newcastle Systems is a free user-friendly app that enables you to quickly perform your own time studies by capturing the time of core processes within your business. It can help you identify which step of the process is NECESSARY (Value Add) or WASTE (non-Value Add). It's also an ideal tool to capture data of specific steps (or tasks) in lieu of performing a full-scale process time study.

From there, a comprehensive overview will outline how much the wasted motion is costing your business and how much you could save annually if that motion is eliminated. Learn more and download the free app at: www.newcastlesys.com/motionmeter.









RETURN ON INVESTMENT

It's easy to underestimate how much time is spent walking back and forth to fixed printers, computers, scales and other equipment, but it is a costly practice. By eliminating just 6 minutes of walking per hour, thousands of dollars can be saved over the course of a year.

Sample ROI Calculation

6 minutes	Number of minutes (per hour) spent walking to a static printer or computer desk
\$22	Average labor rate (w/benefits) per hour
40	Number of work hours per week
5	Number of mobile stations you want to implement throughout your facility
\$2,200	Average cost per Mobile Powered Workstation (Excluding optional accessories. Costs range from \$1,300 - \$2,900)
▼ YEARLY SAVINGS ▼	
\$22,880	\$\$ saved per year when walking is eliminated
1,040	Hours saved per year
5.77	Number of months to pay back initial workstation purchase
newcastlesys.com/ROI	Calculate your own potential savings at:

Actual Customer Results

75%

Reduction in overtime



\$7,500

Reduction in labor costs per operator



63%

Increase in receiving volume



The complete case study, including the Newcastle Systems products which were deployed to achieve these results, can be found at: http://www.newcastlesys.com/payback-time.

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.