Improve productivity and efficiency while reducing employee fatigue with Honeywell N6803 Series scan engines.

BACKGROUND
In a blog post by Beka Rice on Jilt.com, the author discussed how the global economy experienced 10 years of e-commerce growth as result of the Covid-19 pandemic. In the last decade, e-commerce sales worldwide have grown six fold from $572 billion in 2010 to $3.46 trillion at the end of 2019 – a 504 percent growth rate. Customer expectations are also running high; they expect quick order processing and delivery.

Throughout the world, warehouses and distribution centers rely on their employees to efficiently process customer orders – most often through the use of scanning devices – to ensure the right product is picked, packed and shipped. With warehouses varying in size and layout, workers may need to use their scanning devices to scan products both near and far on nearby pallets and high above on shelving. When it comes to scanning solutions, it is important to consider the possibility of workers becoming fatigued with heavy, clunky scanning devices or needing to bend or stretch to reach within the scan range to get a successful read. Often, their devices don’t stay charged for an entire shift. Logistic companies want to ensure the scanning device offers the flexibility on read ranges to cover the working distances their employees need.

To supplement workers, many warehouse and logistics organizations are turning toward drones and delivery robots. McKinsey & Company’s researchers explain that by increasing the use of drones and delivery robots, T&L firms may generate significant positive environmental and efficiency impacts. Whether an operator’s handheld terminal or ring scanner, drone or delivery robot, these devices have a common component: a scan engine. Ideally, these engines must fit into slim, mobile devices and be lightweight with the ability to cover near, mid and far ranges to help decrease worker fatigue and improve efficiency. It’s important to have low power consumption so front-line workers can use their device for eight solid hours with no recharging. And, scan engines need to be easily integrated to mobile applications.

Keep workers productive and efficient is essential

- According to the National Safety Council (NSC), worker fatigue costs employers in the US an estimated $136B in health-related lost productivity annually.
- The transportation and shipping industry is behind only service members (firefighters and police) in terms of how many accidents it experiences as an industry.
- Providing employees with the proper tools for success allows them to complete their jobs safely and efficiently.
SOLUTION
No matter if the product is on a nearby pallet, or over 30 ft away, Honeywell N6803 scan engine with Smart Adaptus™ 8.0 focus technology adjusts the optical parameter and algorithm to assess the barcode distance and quickly capture it.

In warehouses and distribution centers, retail, logistics or in the field, workers need the capability of scanning near, mid, and far range distances to improve workflow efficiency and reduce fatigue. The same case can be made for drones and robots; they need slim and robust scanning solutions for varying distances. Existing long-range imaging options are available, but not as suitable, for more compact designs. The Honeywell FlexRange™ N6803 Series includes N6803MR and N6803FR 2D scan engines. Both variants have the same ultra slim form factor of 6.8 mm height x 23.5 mm width x 16.2 mm depth [0.27 in height x 0.93 in width x 0.64 in depth], with a read range of up to 6 m [19.7 ft] for the N6803MR and up to 10 m [32.8 ft] for the N6803FR. The N6803 Series weighs only 3 g – one of the lightest scan engines in the industry. The engine’s lower power consumption favorably compares to long-range engines within its class and translates to longer battery life in a single charge – reducing the need to re-charge mid shift.

These purposeful design features lend themselves to virtually every potential application by using a single, compact, lightweight device that doesn’t compromise on range, ergonomics or speed.

The N6803MR scan engine is unlike any legacy design. It is all solid state and uses the latest Smart Adaptus™ 8.0 focus technology to adjust the optical parameter and algorithm for reading even out-of-focus images. This allows the depth-of-field (DOF) to extend beyond what traditional single lens architecture is able to achieve, allowing an efficient and comfortable working range needed in transportation and logistics industries.

The N6803FR version further pushes the boundary of the reading range needed in warehouse and distribution centers. With its dual lens architecture and fast, near and far switching mechanism, there’s no time spent re-focusing. From picking to the pallet rack, this scan engine is capable of handling the broadest range of workflows to be a superb choice for workers who need to scan a wide variety of ranges with a single device.

Honeywell offers its customers with the latest SwiftDecoder™ HD host decoder software that leverages customer’s mobility processing power.

The Gen8 DB is perfectly designed to unleash the performance of Honeywell FlexRange™ N6803 series 2D scan engines when customers are looking for a decoded solution. It comes with a dual core processor and four times more memory than the predecessor Gen7 DB to handle advanced decoding algorithms. The compact form factor can be easily integrated into any mobile and wearable devices.
FOR MORE INFORMATION

Honeywell Sensing and Safety Technologies services its customers through a worldwide network of sales offices and distributors. For application assistance, current specifications, pricing, or the nearest Authorized Distributor, visit sps.honeywell.com/ast or call:

USA/Canada  +302 613 4491
Latin America  +1 305 805 8188
Europe  +44 1344 238258
Japan  +81 (0) 3-6730-7152
Singapore  +65 6355 2828
Greater China  +86 4006396841

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Honeywell’s standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items that Honeywell, in its sole discretion, finds defective. The foregoing is buyer’s sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.

While Honeywell may provide application assistance personally, through our literature and the Honeywell web site, it is buyer’s sole responsibility to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this writing. However, Honeywell assumes no responsibility for its use.

FlexRange™, SwiftDecoder™ and SmartAdaptus™ are trademarks or registered trademarks of Honeywell International in the United States and other countries.

1 https://jilt.com/blog/decade-ecommerce-2010s/
3 https://www.nsc.org/workplace/resources/infographics/workplace-injuries-by-the-numbers

Honeywell Sensing and Safety Technologies
830 East Arapaho Road
Richardson, TX 75081
sps.honeywell.com/ast