

Digital Kiosks

Your guide to choosing the right hardware

Interactive kiosks are now part of everyday life, helping us do everything from checking out at stores and ordering food to signing in at clinics and managing building access.

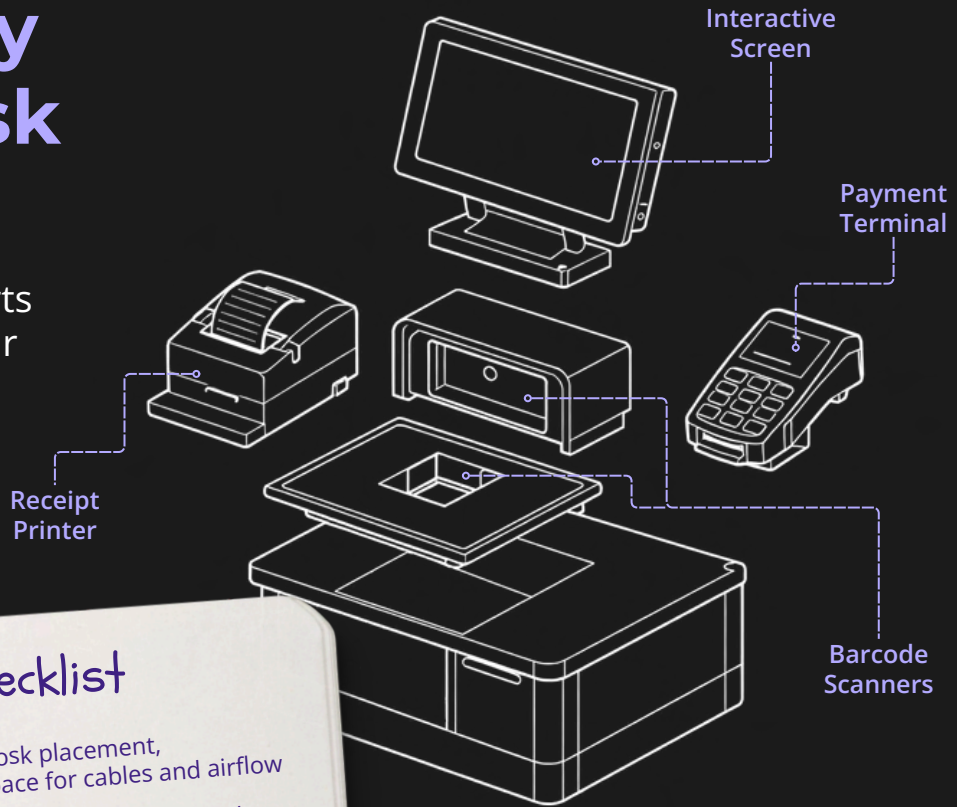
When they work well, they feel effortless. And that usually comes down to **choosing the right hardware from the start.**

This guide explains the **essential considerations** for selecting core components and details how **Newland's kiosk-ready solutions** enable you to create dependable, intuitive, and long-lasting setups.



Anatomy of a Kiosk

Most kiosks share core elements. Learning these parts helps you plan your setup and pick hardware that fits your space.



Kiosk Building Checklist

- Mounting and enclosure** — kiosk placement, component attachment, and space for cables and airflow
- Power supply** — source of power, cable routing, and potential for combined power/Ethernet connection
- Screen** — size, brightness, durability, touch type, viewing angles
- Scanner** — scan volume, user scan angles, performance on phone screens and damaged barcodes
- Add-ons** — printers, payment, cameras, speakers, RFID/NFC, lighting
- Software compatibility** — ensure hardware integrates with the OS and software
- Connectivity** — choose between WiFi, Ethernet, or 4G/5G, depending on needs and environment
- Environment** — indoor/outdoor, dust, humidity, cleaning, temperature, IP rating
- User accessibility** — set height, reach, angle, and on-screen guidance for all users
- Health and Safety** — consider structural safety, infection control, and laser aiming within eyesight
- Security** — physical and digital locks, tamper resistance, port blocking and data protection
- Maintenance access** — how easily staff can reach components for servicing or replacement
- Lifecycle and warranty** — enterprise-grade components, long-term availability and reliable support

A typical kiosk has a screen, a barcode scanner if needed, and secure housing.

Additional components can include printers, payment modules, cameras, or mounting brackets, and more.

**Please note that the diagram above is based on a supermarket self-checkout kiosk. Standard kiosk builds may vary.*

Kiosks in Action

Kiosks aren't just for shops and restaurants—they're now a go-to tool for seamless self-service anywhere.

Retail

- Checkouts
- Loyalty programmes
- Click-and-collect
- Information points
- Vending machines



Hospitality

- Food ordering
- Check-ins
- Ticketing
- Feedback



Healthcare

- Patient check-in
- Prescription collection
- Access control
- Navigation
- Self-triage



Logistics

- Parcel drop-off
- Parcel collection
- Returns processing
- Courier check-ins



Transport

- Ticket purchasing
- Check-in and boarding
- Journey planning



Workplace Operations

- Employee sign-in
- Visitor management
- Equipment tracking
- Access control



Education

- Student check-in
- Library self-service
- Campus navigation



Recommended hardware on pages 6-8



Choosing the Right Technology

Different kiosk applications place different demands on the hardware. The screens, scanners and additional components depend on what the kiosk needs to do, how often it's used, and where it's installed.

Below is a clear framework to help match technology to your needs.

Touchscreens

- **Responsiveness** — fast, accurate touch response is essential in high-volume workflows where users move quickly.
- **Screen size** — Larger screens suit browsing and ordering; smaller screens suit check-in, loyalty and quick interactions.
- **Durability** — Public-facing kiosks need toughened glass and high-duty touch layers to withstand constant use.
- **Anti-glare** — Crucial for bright retail entrances, transport hubs and outdoor-adjacent areas where reflections impact usability.
- **Mounting & ergonomics** — Consider height, angle, accessibility, and whether the kiosk is wall-mounted, freestanding or counter-top.

Real-World Example

One retailer improved customer satisfaction with the **Newland NQuire 750** series.



Real-World Example

A gaming manufacturer used **Newland's FM3281** for reading barcodes on damaged phone screens.



Real-World Example

The **Newland FM430** was used in a fast-food restaurant for its compact, convenient design.

Barcode Scanners

- **Scan volume** — High-traffic environments need scanners built for continuous use.
- **Barcode types** — Consider whether you need 1D or 2D barcodes, mobile tickets, loyalty cards, or to handle damaged or reflective labels.
- **Distance & angles** — Self-ordering and ticketing kiosks often need wide angles and short-range scanning; logistics kiosks may require longer reach.
- **Motion tolerance** — Essential for fast-moving workflows like retail checkout, transport, or warehouse sign-in.
- **Customer Safety** — Consider laser aiming that could project outward, and the mounting height accessibility by children and wheelchair users.
- **Durability** — Kiosks in public spaces, warehouses or transport hubs need rugged, high-duty components that withstand constant use.
- **Integration** — Check for SDK support, OS compatibility, mounting options and ease of embedding into housings or micro kiosks.

Choosing the Right Technology

For certain applications, you may choose to include additional components to support more advanced journeys or industry-specific needs.

Payment Terminals

These are typically required for ordering, ticketing, and retail checkout kiosks. Consider payment methods, mounting options and security.



[Explore our range of label and receipt printers](#)

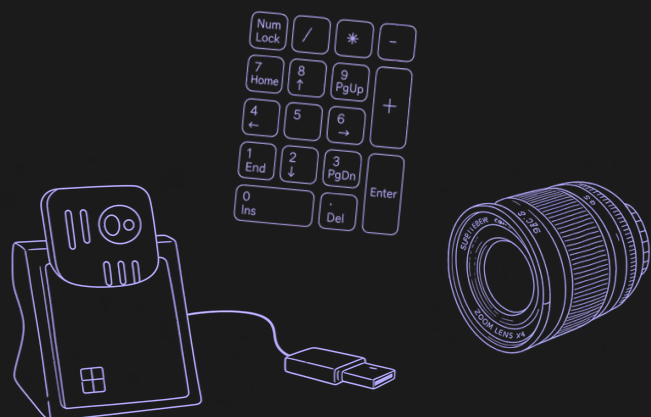


Printers

Printers can be needed for receipts, tickets, labels, collection slips, or even photos. This includes its own set of considerations, but it's recommended to start with matching the speed, materials and print cycle to your needs.

Other Optional Components

Cameras for security or recreational purposes, RFID readers, NFC modules, speakers, microphones, light bars, ID readers, weighing scales and keypads.



Build Your Kiosk With Newland

Now it's time to match the right technology to the job. Newland's efficient, high-performance micro kiosk screens and scanners fit seamlessly into your explored use cases—each device simplifies deployment, enhances reliability, and delivers smooth user interactions.

NQuire Touch Panel Computers



[Learn More](#)

NQuire 500 Skate II

Compact, fast and built for quick interactions. This model is ideal for tight spaces and short user journeys, ensuring efficiency in high-turnover scenarios without crowding the area.

Where it fits:

Quick check-in and lookup tasks across retail, healthcare, workplace, logistics and education.

NQuire 750 Stingray II

Mid-size screen for guided journeys and richer interactions. The size enhances information visibility, making it well-suited for tasks that require multiple steps or complex flows.

Where it fits:

Multi-step or instructional flows in retail, hospitality, healthcare, workplace, logistics and education.



[Learn More](#)



[Learn More](#)

NQuire 1000 Mantra III

Large, tablet-style screen for full self-service workflows. The expansive display optimises information presentation and makes multi-step processes easy to follow.

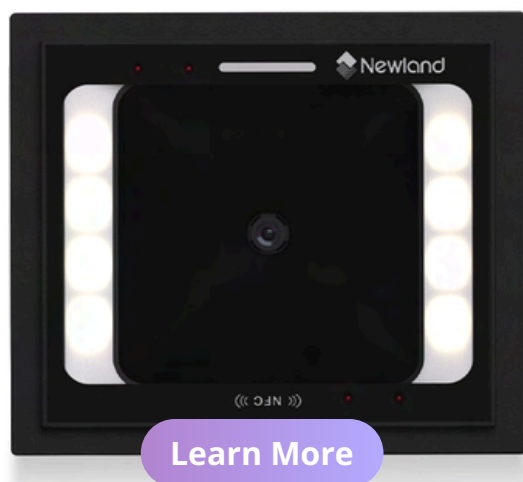
Where it fits:

High-interaction journeys in hospitality (self-ordering) and retail (optional for full self-service).

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Fixed Position Scanners



FM3281 Grouper

Optimised for mobile screens and fast customer interactions, especially in outdoor environments. The included NFC technology allows both barcode and contactless card reading, saving space and supporting a wider range of applications.

Where it fits:

Mobile-ticket and loyalty workflows in retail, hospitality, healthcare and education.

FM3080 Hind

Designed for busy indoor workflows, it delivers reliable close-range scans across a range of barcode sizes — including those displayed on smartphones. It minimises all the little user quirks that normally affect scan success, delivering reliable first-time reads without extra kiosk engineering.

Where it fits:

Multi-step or instructional flows in retail, hospitality, healthcare, workplace, logistics and education.



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Fixed Position Scanners

[Learn More](#)

FM60 Cubera

Rapid barcode scanning, high motion tolerance and AI-powered reading technology for challenging barcodes. It seamlessly integrates into self-service kiosks, ensuring efficiency and reduced checkout queues.

Where it fits:

Point-of-sale kiosks in retail, hospitality, and postal logistics.

FM430 Barracuda

Compact design with fast, accurate scanning and strong motion tolerance across multiple distances. Offers a choice between laser and LED aiming, providing flexibility to match different scanning preferences and environments.

Where it fits:

Fast customer-facing kiosks in hospitality, transport and healthcare access control.

[Learn More](#)[Learn More](#)

FM431 Barracuda Pro

Maintains the FM430 strengths while delivering faster reads, sharper accuracy, and reliable performance in bright sunlight.

Where it fits:

Industrial and operational kiosks in logistics, warehousing and workplace equipment tracking.

Want To Bring Newland's Efficiency to Your Next Kiosk Project?

Contact **Electronic Reading Systems**, your trusted **Newland reseller**, for expert guidance, tailored recommendations, and wide stock availability.

Get in touch



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