RUGGED DEVICES 2025

The definitive 10-step guide to buying rugged devices

April 2025

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THE DEFINITIVE 10-STEP GUIDE TO BUYING RUGGED DEVICES IN 2025

Why do you need this guide?

Every year, new devices are released, and new software is developed to meet the changing demands of warehouse and logistics. Whilst it's important to keep on top of the latest trends, it's also essential that your strategic needs are not compromised. Sometimes the latest and greatest isn't what your business needs to stay productive and maintain high standards of customer service.

This guide will look at the different criteria you should consider, and the killer questions you need to ask when selecting a device, or variety of devices for your warehouse and logistics operations. It will cover everything from operating systems and usability, through to connectivity, form factor and durability. Most of all, it will ensure your investments will deliver a return.

1 Operating Systems - What applications do you use?

Most new rugged devices have an Android or Windows operating system. Consumer grade devices typically run on Android. Some cheaper device manufacturers also have proprietary operating systems.

Whatever you select it's important that the operating system on your new device supports your warehousing applications. If your devices need to integrate with other devices, such as mobile printers or wearables, you should check that they are compatible. Older accessories may not be supported.

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2 Processing Power – How big are the applications you use?

Applications have different processing power demands. Be sure to match the devices in your 'long-list' to the processing demands of the applications they will host. Otherwise, you may find applications 'hang' and operations will come to a standstill.

3 Connectivity Options - How important is a continuous connection?

If people are constantly moving around a warehouse, going inside and outside, then you'll need devices that not only support Wifi, LTE or 5G, but can also make seamless handovers between networks that are unnoticed by the user. Without the correct software, devices can lose data as they change networks, impacting productivity. Connectivity also applies to accessories. If you're using Bluetooth accessories, make sure your new device will support them.

4 Environment – Where are the devices going to be used?

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5 Rugged Credentials – Will it bounce?

An extreme example, but you don't want a device to fall from a height and break into pieces. If your devices run the risk of a drop onto hard floors, like concrete, then you need devices that are rugged. Aside from the cost of replacing broken devices, you also must consider the cost of downtime, productivity and missed SLAs. These are important considerations to add to your business case.

6 Barcode Scanner – What frequency and distance demands should it meet?

Will you expect a device to scan every second it's in use? Does it need to scan from a distance, or close range, or both? Often if it can do close range, it's not a sure bet it can do long distance, despite what you might be told. Test the devices to ensure it can switch from one to the other seamlessly if that's an important requirement.

7 Battery – Will it last a full shift?

This can often be the deciding factor when it comes to rugged device selection. Batteries that won't last a full shift can been huge productivity killers. They are frustrating to use and result in downtime as workers stop to swap devices or batteries mid-shift. Look for devices that have batteries that are designed to last a full shift.

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8   Warranty – What warranty comes with the device?

Every manufacturer should provide a warranty for the device. However, the length of the warranty can vary and it's worth looking at what added warranties you can get. Sometimes adding another year can make a huge difference to the overall ROI of a device, especially if you can also negotiate a support package with your supplier. Being able to send a device for repair and get a replacement device to use until it's fixed, will pay dividends.

9   Form Factor – How is the device being used?

Devices come in a range of different shapes and sizes, each designed for a set of use cases. If your devices are being used in the warehouse for extensive scanning, for applications like order picking, you'll probably want a device with a pistol grip that is great for scan-intensive applications.

For logistics you'll probably want a device with an alphanumeric keyboard, a scanner and a camera. If you're using the device on a forklift, then a truck mount is the device for you. Make sure you select the device that is best suited to your application.

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10 Costs and ROI – How long does this investment need to last?

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See what ROI you can achieve with our Rugged ROI Calculator

Beware of hidden costs of devices

It's important to ensure you select a device that is fit for purpose. Cutting down the device specification to save money could end up costing you more in the long term. When selecting a device, it should meet the demands of your applications and your environment. The hidden costs of downtime due to device failure can soon add up. Scanners that can't scan barcodes at the correct distance and devices that keep disconnecting from the network can also be big drains on productivity.

Answering the ten questions in this guide will help you develop a rugged device strategy that meets the needs of your business today and tomorrow.

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ASK THE EXPERTS

At TouchStar we're rugged device experts. So don't leave device selection to chance.

Call us on **0161 874 5050** to set up a free on-site consultation where one of our experts will assess your environment and help you to select the right device for your business.

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