

Top Considerations When Buying a Digital Pathology Scanner

Are you thinking about purchasing a digital pathology scanner? We offer some tips for things to consider during the buying process.

1. What Functionality Do You Need?

There are many digital scanners on the market today, each offering different feature sets. Decide what functionality is important to you.

- Good image quality is vital to properly assess your slides. Make sure that the scanner images are fit for purpose and clearly show the cellular features, depending on the tissue specimens you will be scanning.
- Scanner capacity can range from one to several hundred slides. Consider how many slides you will need to scan in a typical day or batch, and what level of throughput you need.
- Many companies will provide scan time in seconds, but this does not always take into account time needed for the file to be compressed, sent to the image server, and then made available for viewing. What is the actual time to view your slides?



- Will you be scanning brightfield, fluorescence, or both? Do you need Live Viewing for telepathology? What about multi-plane z-stacking for cytology slides? Choose a scanner that has the resolution and scan modes you need.
- A digital pathology solution will typically include software as well as hardware, for applications such as image/ data management, sharing, and image analysis. Decide what solution you need and which vendor(s) can provide it.

2. Is it Easy to Use?

The digital pathology scanner is a new piece of equipment for users to learn. Ergonomics and ease of use are vital for user adoption.

- Test out the user interface to see if it is intuitive and easy to navigate. Get a sense for the learning curve involved with different operations.
- How long does it take to set up a batch of slides for scanning? Can you customize the set-up, e.g. with different settings for different slides.
- How good is the tissue finder at locating tissue to scan? Does it leave some out or catch all of the tissue?
- Check if there is a "quick start" mode for scanning, so you can rapidly set up and walk away with minimal interaction.
- What is the method for accessing images after scanning, for Quality Control review?

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3. Does it Fit With Your Existing Infrastructure?

Minimize disruption to your laboratory workflow by ensuring that the digital pathology scanner fits as easily as possible into your existing laboratory infrastructure.

- How much desktop space does the scanner require? Where will it fit in the lab?
- Does the scanner make a lot of noise when it is operating?
- Does the scanner vendor offer integration with your lab's LIS, either off-the-shelf or as a custom solution? Ask about their experience and expertise in LIS integration.
- Does your lab use a barcoding system for slides? Selecting a scanner that can read your barcodes can save a lot of manual file naming and sorting.
- Digital pathology images can be up to several GB in size, with higher scan magnification producing larger image files. Consider how your IT infrastructure will handle image storage (on-premise or in the cloud), as well as the network bandwidth required to view and share such large files.
- What cybersecurity feature does the scanner and/or operating software include? How much knowledge does the manufacturer have of cybersecurity?
- Make sure your IT department is involved in the conversation as early as possible. They will be able to ask the right questions around data security, storage requirements, deployment, and integration.

4. Can You Future Proof Your Investment?

Digital pathology is a significant investment. Finding a vendor you can rely on can provide peace of mind, with the knowledge that your solution is future proof.

- Does the vendor provide a comprehensive service and maintenance contract to cover your products? Is there local support in your area including out of hours support? Is your purchase covered by a warranty?
- How frequently does the vendor produce updates to their product, e.g. software patches?
- Consider the benefits of partnering with a single solution provider, versus building your own bespoke solution with products from several vendors.
- Typical lifespan for a digital pathology scanner is 5 years. Ask the vendor if they provide any kind of trade in program for older model scanners, so you can upgrade in the future.

5. Is the Brand Reliable & Proven?

Research online resources and ask your peers who have experience with digital pathology – which vendors have the best reputation for reliability and quality products?

- How long has the vendor been in the market? What is the size of their install base?
- How many peer reviewed publications reference the vendor products?
- What do industry reviews say about the quality and reliability of their solutions?
- Does the vendor have a good reputation for providing service and addressing issues promptly?
- Is the vendor portfolio offering broad enough? Are they continuing to add to their product offerings?



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