

# OpenStand®

Custom microscopes and optical systems



# Fast-track solutions for imaging



## Don't compromise on your requirements

Whether developing new automation techniques and software or new imaging methods, you can quickly find that you need a microscope system tailored to your application and business. Traditionally, the options available have been to either conform to existing systems or build your instrument from scratch with a significant upfront cost. Prior Scientific has developed OpenStand® to offer a working platform to build OEM solutions and one-off customizations with excellent value for money and reduced development time.

## Reduce your time to market

The fully motorized OpenStand offers a working development platform that can be set up quickly with a system that works and accelerates development. Starting your journey to a customized OEM instrument with OpenStand is also very cost-effective. You can get your motorized microscope system up and running for a fraction of the cost of traditional methods. Previously, you could only build a prototype quickly by purchasing different components from various vendors, or you would have to buy a very expensive automated microscope. With OpenStand, you get a whole system customized to your application. Starting with OpenStand, you can be sure that the components are compatible and that your solution is fit for production.



Production-ready instruments developed using OpenStand.

## Platform that evolves with your development work

With OpenStand, you get a working system to start developing your application immediately, and adaptations can be made flexibly during your development phase. Prior Scientific systems use the same commands, offering a linear development route. With OpenStand, you can develop your software and hardware in parallel in preparation for your final production-ready instrument.

## Why start with OpenStand for customized solutions?



**Cost-Efficient** – reduce your costs by only purchasing the components you need.



**Speed to Market** – complete system in one purchase with a short lead-time.



**Easy Automation** – choose what you need from our vast portfolio of motorized and automated components.



**Customized Components** – specific requirements can be designed by our in-house team.



**Expandable** – add components as your needs grow or only keep the ones you need for an OEM design.



**Future-Proof** – software developed on OpenStand is portable.

“The most significant advantage of OpenStand is that we can get a working prototype to our customers fast. They can start developing their application straight away, reducing their development costs and time to market significantly.”

Thomas Freda  
CEO, Prior Scientific



# Straightforward approach to custom solutions

## From design to manufacture

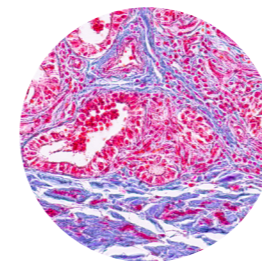
With OpenStand, you get a whole system and full support from Prior's expert team. The process starts with a consultation with our product managers to understand your application needs and how OpenStand could improve your system performance. We work closely with you to develop your system throughout the entire process. Prior Scientific has development and production all under the same roof which enables continuous communication between different departments for effective transitions from concept to prototype, and finally to manufacture.

“With OpenStand, we have combined our expertise in iterative design and manufacturing. We are able to give our customers the ability to move ahead of their competition and get to the market faster.”

Simon Bush  
Product Manager, Prior Scientific

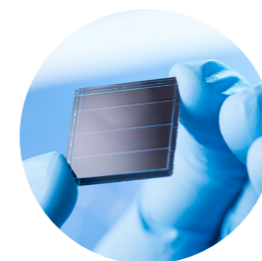


## Extensive experience with an array of applications and markets



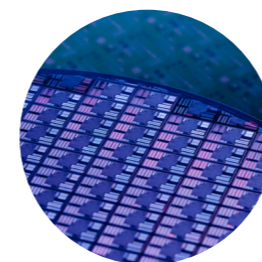
### Life sciences

- Cell culture
- Confocal imaging
- Neuroscience imaging
- Fluorescence imaging
- Cytology & pathology
- Slide screening
- High content screening



### Materials

- Metrology
- Inkjet
- Reflective optics
- Photovoltaic (PV)
- Diamond fly cutting



### Semiconductor

- Data storage
- Semiconductor wafer inspection
- Micro-electro-mechanical systems (MEMS)
- Laser ablation

## Our expertise at your disposal

Prior Scientific's team has extensive experience with different microscopy applications from life sciences to materials and semiconductors. Prior has over 30 years of experience developing customized solutions. We design and manufacture all the key technologies for your instrument. If we don't have a solution ready for your needs, we have the know-how to develop it.

Prior Scientific has manufactured precision optical and electro-mechanical equipment and instrumentation for over a century. Prior's manufacturing is renowned for its quality and our manufacturing and testing capacities can extend from a single unit to mass production. Our facilities in the UK and USA are ISO 9001:2015 certified and our UK facilities are also certified to ISO 14001:2015 (Environment) and ISO 45001:2018 (Health and Safety). We also have experience assisting clients with their ISO 13485 certification.

## Why choose Prior Scientific?



### Experts in customizing

Over 30 years of custom optical system experience



### Integrated design and manufacturing

For a seamless product development cycle



### Dedicated customer team

All of Prior's expertise at your disposal

# How to start with your customization

OpenStand and Prior's extensive portfolio of OEM parts offers a fast-track to a prototype instrument. We work closely with you so we can provide an optimal solution to your technical and business demands.

## Large range of components

Customization starts with selecting the right OpenStand base system for your application. You can tailor your microscope with the right optics and illumination.

## Automate what you need

Prior Scientific's team will help you to select the best components for your automation application. Whether it is selecting the best drive configuration for your stage, choosing the optimal robotic loader system, or testing your samples with a laser autofocus, Prior can ensure that you receive a fully qualified prototype instrument.

## Easy software integration

Prior products are compatible with a wide range of third-party control software. You can also develop your own software by downloading our free open access SDK.

## Contact us

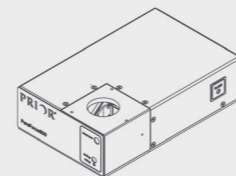
for consultation on how we can build your solution and software compatibility  
[prior.com/contact](http://prior.com/contact)  
or email: [inquiries@prior.com](mailto:inquiries@prior.com).

“Adding only the components you need for your application brings significant savings to the final instrument.”

Simon Bush  
Product Manager, Prior Scientific

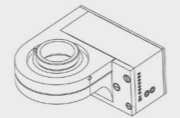
## Extensive possibilities for custom instruments

### Autofocus

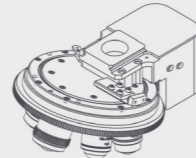


### Nose pieces

Piezo objective positioner



Motorized up to 6 positions



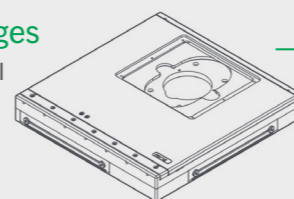
### Objectives

Bright/dark field  
Materials 2–100x



### Motorized stages

75–300 mm travel



### Peripherals

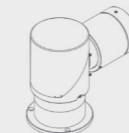
Joysticks



Controller up to 16 axes

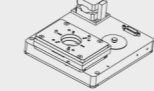


Tube lens enclosure (different tube lens options available)

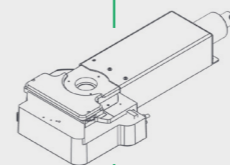


Camera adapters including C-mount, F-mount and T-mount.

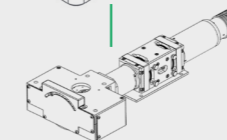
Filter wheels



Episcopic illumination  
Fluorescence



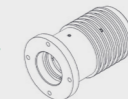
Materials



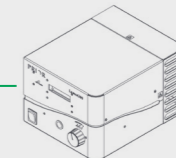
Filter wheels



LED



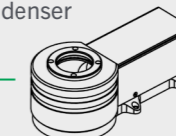
Metal halide



OpenStand frame and Prior Scientific's product range for fast-track development.



Abbe condenser  
Phase condenser



Diascopic illumination  
Kohler

Critical

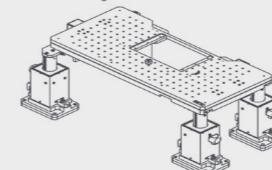


### Other accessories

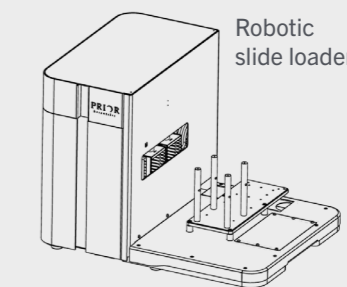
Translation stage



ZDeck



Robotic slide loader



Discover more...



## Queensgate Nanopositioning

Piezo-driven, flexure guided positioning stages for high-speed, high precision applications.



## Design and Manufacturing

End-to-end image system design and manufacturing services for customized products.



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*Scientific*

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Management  
CERTIFIED

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Management  
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