

Exyn Nexys

Fully Modular 3D Mapping Solution



FAST SURVEY-GRADE
DATA CAPTURE AND
PROCESSING



REAL TIME
VISUALIZATION
AND COLORIZATION



SEAMLESS
INTEROPERABILITY WITH
EXISTING WORKFLOWS



IP67 RATED FOR DEMANDING
INDUSTRIAL AND
COMMERCIAL SETTINGS



Autonomous LiDAR Mapping and Navigation – Here When You Need It

Exyn’s autonomy is smarter and more powerful than anything in the market, making mapping faster, safer, and more efficient than ever before. Our proprietary autonomy algorithms, coupled with our SLAM-based LiDAR scanning technology deliver survey-grade results without a pilot.

With the Exyn Nexys ecosystem, you can start with a mapping-only solution, then, if your needs expand to require autonomy, you can license the software quickly and easily with no downtime.



Capture Survey Grade Data Fast



Real Time Colorization & Visualization

Get real-time visualization of your captured data with full detail and colorization in the field to ensure the scan area is correct and complete before you leave the site. ExynView, our proprietary software, controls capture and post processing in the same system, allowing for fast on premises processing for more streamlined workflows.

Fast & Efficient Capture of Survey Grade Data

Incredibly adaptable to changing environments, Exyn Nexys' SLAM-based spatial mapping is capable of capturing up to 1.9 million scan points per second at up to 5mm @ 1 sigma, while continuously updating the map as new data is received.

Versatile Deployment

Designed to be highly versatile and ruggedly ergonomic, the Exyn Nexys can be quickly and easily switched between a variety of configurations, giving users the flexibility and cost efficiency to use one device in any mapping environment - inside, outside, below ground, short or long distance, autonomous or piloted, connected or not connected to communications networks. It also includes a custom interface guide that lets users dream up their own use cases and mounting configurations.

Deployment Options for Every Use Case



Aerial Robots

The Exyn Nexys is easily integrated with compatible drones. You can choose to use our autonomous mapping with a growing number of drone models, or you can choose mapping-only on a compatible drone that you pilot yourself.



Terrestrial Robots

Exyn Nexys seamlessly integrates with terrestrial robots in several ways. You can choose to use our autonomous mapping with a growing number of ground robots, you can choose mapping-only on a compatible robot that you pilot yourself, or you can take advantage of the robot's integrated semi-autonomous mode.



Handheld

Exyn Nexys' lightweight, ruggedly ergonomic design makes it easy to carry for handheld scanning operations. The handle's specially designed octagon facets and perfectly balanced position provide a comfortable, non-slide grip that eliminates hand fatigue on long scans.



Backpack Mount

The most comfortable scanning walk you will take! Our ruggedized, water resistant backpack holds and powers Exyn Nexys while scanning, and also serves as a storage and travel case. Inside includes secure storage for the Exyn Nexys, battery mounting for V-mount batteries, and areas for the tablet and charging infrastructure.



Vehicle Mount

Exyn Nexys can be easy and securely mounted to almost any vehicle or surface, allowing you to capture a complete map in rugged environments. Mount options include a 120 lb vacuum suction cup system, and magnetic vehicle mounts.



Mounting Interface

The Exyn Nexys mounting interface ships with all units and may be used to securely mount the Exyn Nexys in a variety of mounting configurations, including custom mounting configurations.



Exyn Nexys Ecosystem of Accessories



GPS Module

Dongle that can be mounted to Exyn Nexys to add GPS data to the post processing algorithm to eliminate drift in long scans.



Protective Cage

The Exyn Nexys cage provides 360 degree protection for the Exyn Nexys in challenging environments with no adverse effect on scan quality or accuracy.



Drone Link

The Exyn Nexys Drone Link is the hardware interface between the drone and Exyn Nexys for manually piloted operation or autonomous flight with the optional autonomy license.



Terrestrial Robot Link

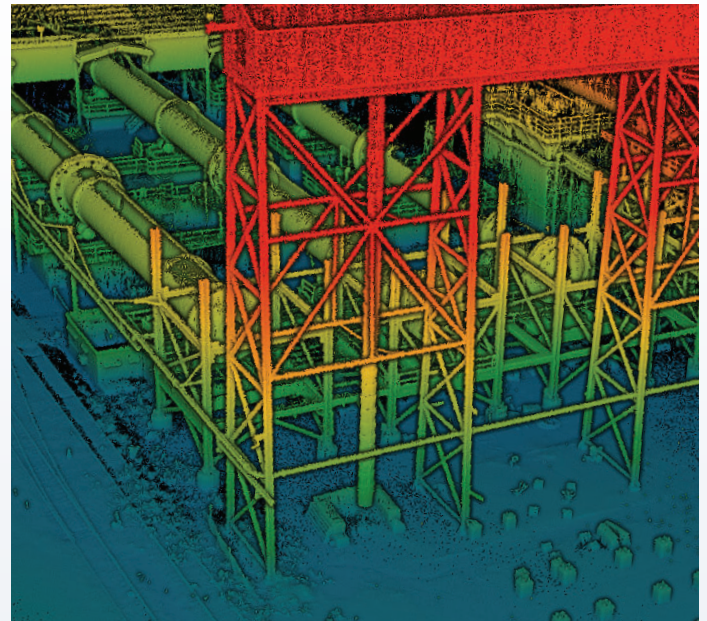
The Exyn Nexys Terrestrial Robot Link is the hardware interface between the robot and Exyn Nexys for manually piloted operation or autonomous missions with the optional autonomy license.



Backpack

The Exyn Nexys Backpack is a ruggedized, water resistant backpack that holds and powers Exyn Nexys while scanning, and also serves as a storage and travel case. Inside includes secure storage for the Exyn Nexys, battery mounting for V-mount batteries, and areas for the tablet and charging infrastructure.

Why Choose Exyn Nexys?



The most advanced autonomous navigation – when you need it

Proprietary autonomy algorithms, coupled with SLAM-based LiDAR scanning technology deliver survey-grade results without a pilot - even in GPS-denied, hazardous, and unilluminated environments. Start with mapping only, then upgrade to full autonomy when you need it.

Rugged and configurable– the right scanning tool for all your needs

Exyn Nexys can be quickly and easily switched between a variety of configurations - handheld, backpack, aerial robot, terrestrial robot, vehicle, pole, custom configurations. With an IP67 rating, users have the flexibility and cost efficiency to use one device in any mapping environment.

Fast capture, survey grade accuracy

Exyn Nexys's SLAM-based spatial mapping delivers consistent and repeatable survey grade accuracy of up to 5mm @ 1 sigma at up to 1.9 million scan points per second while continuously updating the map as new data is received.

See your scans in detail – before you leave the field

Capture and post processing is done in the field, allowing for real-time visualization of your captured data with full detail and colorization to ensure the scan area is correct and complete before you leave the site.

