Autonomous Lifting and Hauling

with the DriveMod- enabled Forklift

Our autonomous forklift enables you to automate manual pallet transport workflows.

These DriveMod-enabled forklfits are able to make intelligent, real-time decisions, delivering materials to the right place at the right time — automatically. By offloading these duties to a robot, you'll minimize safety risks and free your team to focus on other priorities.
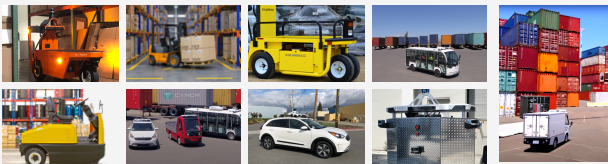
Whether retrofitting your forklifts or investing in new ones, DriveMod is the only solution you need to enable your industrial vehicles to drive themselves. DriveMod gets all of your vehicles humming as a single, unified AV fleet so you can work faster for less cost.

Cyngn's Enterprise Autonomy Suite includes two key components:

DriveMod
Full-Stack Autonomous Driving Software System

Cyngn Insight
Autonomous Vehicle Fleet Management System

- Fleet management system
- Web-based software runs on desktop, mobile, and on-vehicle dashboards.
- Operational analytics
- Teleoperation
- Real-time diagnostics
- Asset tracking

About DriveMod

DriveMod is Cyngn's full-stack autonomous driving solution. It integrates with off-the-shelf sensing and computing hardware to enable industrial vehicles to perceive the world, make decisions, and take action.

Vehicles running DriveMod can start, stop, take commands, drive to different stations, and adjust to changing conditions on the ground.

Because our technology fits onto the vehicles you already drive, you can bring autonomy to your operation without having to make major changes to how your facility is organized or how you organize the day's work.

Multiple Industries

Intelligent FMS

Clear ROI

Quick Deployment

The DriveMod-Powered Forklift:

Works with Pallets of All Sizes
Detect and analyze pallet dimensions in real-time, allowing you to handle materials of any size with ease.

Surefire Safety and Stability
Equipped with intelligent load stability features that maintain balance and stability during operation.

Industry-Leading Load Capacity & Multiple Unit Stacks
A load capacity of 10,000 pounds.

About Cyngn Insight

With Cyngn Insight, you can intuitively manage, monitor, and command your autonomous forklifts. Our Autonomous Fleet Management System has been thoughtfully designed to be simple and straightforward to operate. It adapts well to your existing workflows and will help make your team more efficient.

Our dashboards provide a comprehensive overview of your fleet's performance and utilization — from anywhere. With this valuable data at your fingertips, you can make informed decisions to improve the efficiency of your operation.

Track key metrics, including —

📍 Location	🔋 Battery
🎯 Current Mission	📊 Network Status
	📍 KPIs and Productivity Metrics

Case Study: DriveMod brings immediate efficiency gains to Global Logistics and Fulfillment, a Las Vegas-based 3PL facility

↓ **64%** A **64% reduction in human labor costs** when using Cyngn's DriveMod-enabled vehicle vs. using a forklift.

↑ **33%** A **33% increase in efficiency** when using Cyngn's DriveMod-enabled vehicle vs. using an electric pallet jack.

Read the Case Study at go.cyngn.com/GLF ▶

"The bottom line is DriveMod has made us more productive. Instead of manually moving goods around the warehouse, our team can stay focused on picking, packing, and other high-value assignments."

— **Kenn Morris | Vice President GLF**

⬡ Deployment at Flambeau

"Cyngn's DriveMod really unlocks the potential for us to start the journey of increasing throughput and decreasing the time to market from the manufacturing floor."

— **Joseph Peterson | General Manager, Flambeau**

Technical Specifications
BYD ECB50 Forklift

Can Work Across a Variety of Vehicle Types

Artificially Intelligent

Over-the-Air Updates

Automated Missions

Multiple Safety Systems

Vehicle Information

Overall Width	59.7 in
Length to Face of Forks	115 in
Overhead guard height	92.2 in
Service Weight (including battery)	16,170 lbs.
Tilt Range (forward/backward)	6/8 deg

Performance

Autonomous Speed (Max)	4.5 mph
Manual Speed (Max)	11 mph
Autonomous Lift Speed	1.5 - 2 m/s
Towing Capacity (Max)	11,000 lbs.
Turning Radius (Min)	102.4 in

Safety Features

Emergency Stop

Virtual Bumper (collision avoidance system)

LED Visual Communication System

Audio Cues

Automation Interface

Human-Machine Interface

Chassis

Drive Motors	Dual
Steering	Synchronous steering
Brakes	Electric braking system
Wheels & Tires	Solid, non-marking solid, pneumatic

Energy System

Operating Voltage	80 V
Battery Power	43.2/64.8 KWH
Battery Weight	1,985 lbs.
Type of Drive Control	AC
Charge Time	2.6hrs. / 4 hrs.

Runtimes are based on manufacturer recommendations. Times may vary based on speed and load weight

Sensor Suite

Multiple 3D LiDAR — 360° Coverage

RGB Camera

Infrared Camera

TOF Camera

Connectivity

802.11 Wifi

Ethernet Port for Data Offload

To learn more about bringing self-driving vehicle technology to your organization, please reach out.