

# AGILOX OFL

Datasheet



Find comprehensive details and specifications of the AGILOX OFL in the booklet.

www.scanlox.com



# AGILOX OFL Free Lifter

Scissor-Free

**SWARM Intelligence** 

**Omnidirectional** 

**Open Interfaces** 

**Analytics** 



The AGILOX OFL is a scissor-free AMR that redefines flexibility in material handling. Its innovative design enables seamless transportation, stacking, and storage of pallets and other load carriers up to a height of 1.200 mm without requiring infrastructure changes.

With omnidirectional movement and advanced safety technology, the OFL ensures precise, efficient, and fully autonomous operation in any environment.



## Performance Data

1.200 800 kg 1,4 m/s

Max. Lifting Height Max. Lifting Weight Max. Speed

## **Dimensions**

1.655 x 800 x 1.988 mm (L x W x H)

## **Specifications**

4 Omnidirectional Drives 2.200 mm

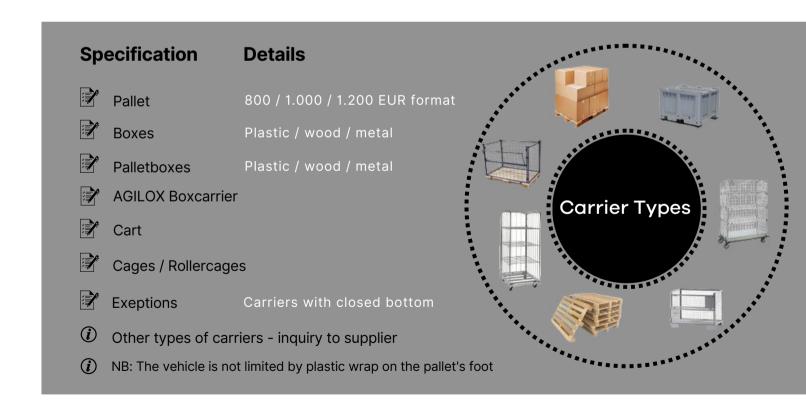
Drive System Turning Circle

Dual Electric Spindles 575 kg

Lift System Unit Weight

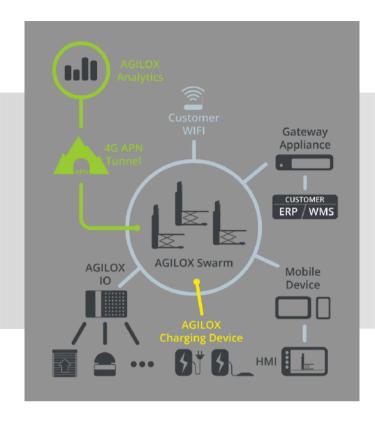
LiFePO4 with BMS 3 min charging = 1 h operation

Battery





# System Overview





## **Efficient Charging**

Operates 24/7 without battery replacement. 60 minutes of operation with just 3 minutes of charging.



#### Wi-Fi Connectivity

Requires customer-provided Wi-Fi for seamless communication between vehicles.



## System Integration

Easily connects to customer ERP, WMS, or MES via AGILOX JSON API.



## **Swarm Intelligence**

Decentralized navigation optimizes fleet coordination and efficiency.



#### **Mobile Control**

The AMRs are managed via smartphone, tablet, or any browser-enabled device.



## **User-Friendly HMI**

The interface is accessible through a web browser, ensuring easy interaction at any time.



## **Seamless Infrastructure Integration**

The IO Box enables connection with existing systems, such as roller doors and fire alarms.



## **Advanced Analytics**

Real-time access to key performance data from anywhere.



# **HMI**

## Customer-friendly Interface



The control system features a user-friendly and flexible HMI, providing full control, real-time monitoring, and the ability to adjust autonomous mobile robots and system settings on any device.

## **Key Features**

#### Open Interface

Seamless integration with existing systems.

#### Zoom function

Improved screen visibility for detailed operation.

#### **Realtime Vehicle Overview**

Instant status updates on all AGILOX units.

#### **Direct Workflow Adjustments**

Modify layouts and parameters instantly.

#### **Heatmaps**

Visualize movement patterns and optimize efficiency.

#### **Comprehensive Tools**

All necessary tools included, with error notifications via email or SMS.

#### **Integrated Documentation**

Always accessible and directly embedded.

AGILOX seamlessly integrates with customer management systems. Orders from WMS, ERP, PMS, or MES are automatically converted into transport requests. The integration is provided as a gateway solution with an API (REST) for communication, utilizing JSON scripts combined with OPC I/O.

## Flexible Order Trigger Options

#### **Easy Button**

Operators can initiate transport orders via screenconfigured buttons.

#### **Scheduled Orders**

Predefined transport tasks executed at specific times or intervals.

#### **Sensor Activation**

Automatic triggering based on PLC signals.

#### **Software Integration**

Seamless connectivity with customer management systems.



# **AGILOX Analytics**

## Performance Data

## **Easy Access**

Analyze logistics data effortlessly via a browser.

## **Optimized Operations**

Leverage real-time insights to improve fleet efficiency.

## **Maximum Security**

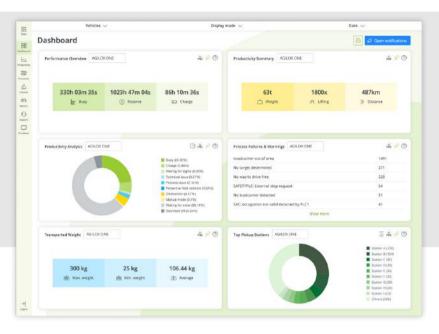
Certified data center with highest security encryption.

## **Detailed Reports**

3.5 billion + data points per vehicle for precise analysis.

## Anywhere, Anytime

Access data from any device for continuous optimization.







Safety in the Overview by

**APN** connection ISO 27001 certified data centers Encryption according to highest standards



# **Embracing the Power of Simplicity**



## X-SWARM Technology

#### One for all. All for one. All for you

All Agilox AMRs communicate in real time, exchanging data on their position and status several times per second. They autonomously allocate tasks, manage the supply and removal of goods, efficiently navigate by identifying free routes, and effortlessly adapt to changes in their environment.



## Plug & Perform

#### it's as easy as that

Plug & Perform technology allows for AMR deployment in under 12 hours, with workflows adaptable in minutes. Skip the long implementation times and high commissioning costs while easily integrating third-party modules, such as (high-)speed doors and IT systems. Built for open communication, the AMRs use Wi-Fi connectivity for smooth interaction and control.



## (P) Unique Simplicity

#### Because it's about ease of use

Engineered with a user-first approach, the technology is designed for intuitive and seamless operation. Hardware, controls, software, and cloud architecture are developed in-house and fully integrated to streamline every phase, from commissioning and operation to maintenance, control, and workflow adjustments.



# Flexibility

#### Being flexible is a guarentee of success

The AMRs instantly adjust to changing requirements with a single click. Stations, map layouts, and entire workflows can be created, modified, or relocated effortlessly, without extra costs or external assistance.



## Safety

#### It's also absolutely safe

The AMRs operate safely alongside employees, navigating shared travel and transport routes without incidents. Advanced safety sensors and a dynamic 360° protective field enable smooth and efficient performance in mixed traffic environments. They are certified to meet key industry safety standards, including CE, UL, and ISO 3691-4.



## Supply Chain

#### Simply no more Standstill. 24/7

Maintain a seamless material flow with absolute flexibility, even in dynamic environments. In the event of a robot failure, the remaining AMRs in the swarm automatically take over to ensure uninterrupted operations. Prevent supply shortages and optimize transport throughput times with fully automated efficiency. Thanks to ultra-fast charging, AMRs are ready for use again within minutes, ensuring a perfectly synchronized material flow.



# Features and Add-Ons



## **Obstacle Avoidance**

3D sensor system improves safety in human-machine environments.



## Signal Lighting

Multi-color signals (blue, green, red) for increased visibility, with additional fork-tip lights (white, yellow).



## **Charging Devices**

Available as mobile or stationary units.



## **Rubber Guards**

Front and fork-tip protection to deflect dirt.



## **Barcode Reader**

Reads barcodes and QR codes for identification.



## **Touch Display**

Provides a clear overview of the AMR's status and enables simple user interactions.



## **ESD Protection**

Prevents electrostatic charging in ESD-sensitive areas.





# Safety & Scanners



The AMRs are equipped with advanced safety systems designed to protect employees, infrastructure, and the robots themselves.

Compliance with international standards such as **ISO 3691-4 and EN1525.** 



# **Variations**



ONE AMR



NFK Mono Fork 1200 | 1400



OCF Free Forks 1200 | 1400 Payload: 1.500 kg | 750 kg

Max. Lift Height:

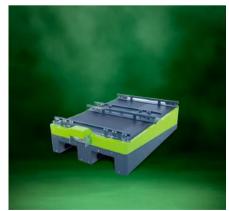
1.600 mm = Vehicle Height 2,56 m 1.200 mm = Vehicle Height 2,34 m



ONE Longer Forks 1400 | 1600 | 1800



ODM Mono Fork 600 | 800



**Box Carrier Different Variants** 

