

## Clear Workflows. A very simple App.

ambos.io offers a customized tool for the creation, management and execution of work processes.



### Cloud-based WebApp at <https://app.ambos.io/>

- Compatible with known browsers and devices
- Accessible from any place at any time
- Easy user management



### Standardized work instruction management

- Create instructions easily via drag & drop
- Digital interface for step-by-step executions of e.g. assembly instructions
- Easy integration of media files such as videos and images



### Document functions easily integrated

- Standardized document format incl. automatically generated table of contents
- Automatically generated change history
- Automatical creation of a bill of materials for individual steps - perfect for an easy work preparation



## Data acquisition along the work processes

- Capture of traceability data for further optimization
- Integration of important elements such as serial numbers, batch numbers etc.
- Export of captured data as part of an assembly PDF possible



## Analyses for the realization of the full potential

- Capture of selected attributes such as temporal progressions (cumulative or for the day), used workstations, cancelled assemblies etc.
- Export of raw data via standard API for own further processing

## HARDWARE FOR FURTHER SUPPORT



### ambos.io Assembly Station

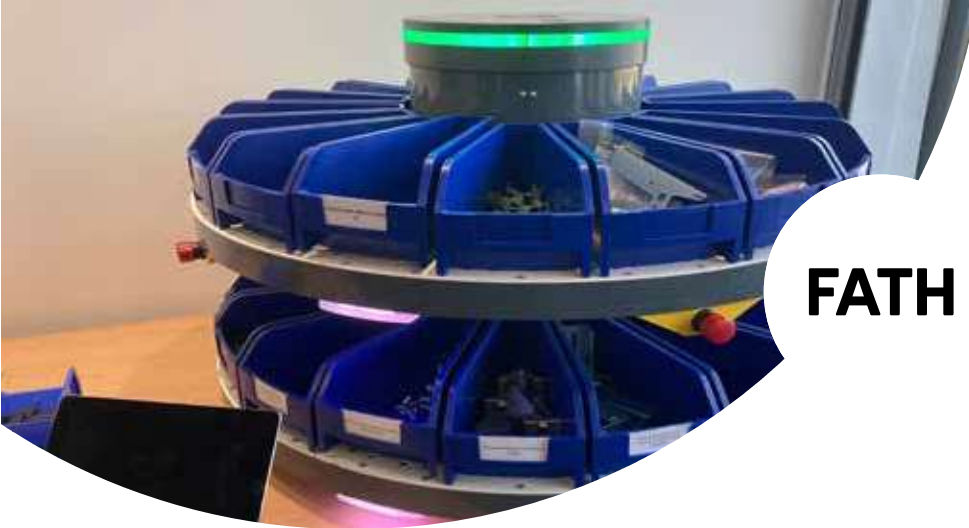
ambos.io Assembly Station and ambos.io WebApp: A perfect duo!



The modular and flexible ambos.io systems offer benefits for the entire company. Guide your workers step by step through your assembly processes.

Automated worker and picking guidance ensure higher quality. Real-time stocktaking enables you to achieve security of supply.





FATH



ambos.io

## AMBOS.IO ASSEMBLY STATION

Automated worker guidance and stocktaking directly at the assembly station



- Higher quality: Easy worker guidance with interactive WebApp and dashboard
- Supply security: Real-time stocktaking with integrated scales
- Time savings: Fast introduction of new workers and new assembly instructions
- Space optimization: Compact order in a small area. Up to 18 boxes on one level.
- AWS Cloud linking with interfaces

### HIGHLIGHTS

A high variance of small lines is often installed at assembly stations. The inventory is not recorded or only as part of a time-consuming inventory. It is hardly traceable whether the right individual parts are assembled in the correct quantity.

With the ambos.io Assembly Stations, existing assembly stations are equipped with up to four ambos.io slices. The slices are modular - additional levels can be retrofitted as needed.

An illuminated sensor and a weighing unit are installed in each slice at the removal point. It detects the removal in real time and thus records the current stock. Based on this sensor technology, the worker is guided through the assembly process. When the correct number is removed, the work step is automati-

cally confirmed and the next article is advanced. The illuminated button serves as a Pick2Light system and shows the worker which article must be removed / assembled next.

All disks can rotate independently of each other. The system always chooses the shortest path and thus ensures the fastest possible supply.

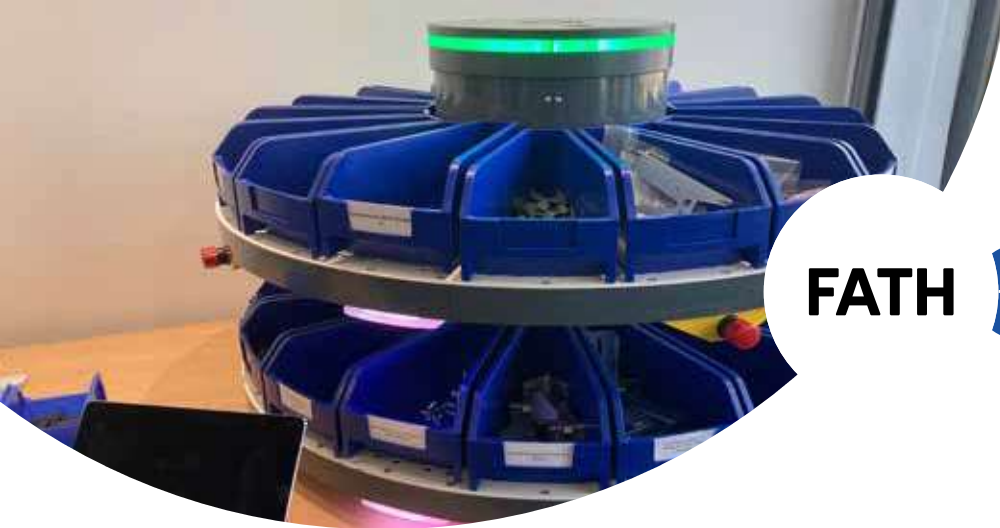
In the ambos.io WebApp you can create or upload a monthly schedule or a picking list. Due to the cloud-based approach, other existing systems can be connected in addition to the ambos.io Assembly Station.

FLEXIBLY  
SCALABLE



### EVERYTHING RUNS SMOOTHLY!

ambos.io Assembly Station and ambos.io WebApp: A perfect duo! The modular and flexible ambos.io systems offer advantages for the entire company. Guide your workers step by step through the assembly processes. Automated worker guidance and secure picking ensure higher quality. Real-time inventory tracking helps you achieve supply security. You can determine minimum stock levels for your items and receive a notification as soon as they fall below these levels. Seamless digitization of the supply chain brings more efficiency to processes, and with manufacturing and traceability data you create cross-divisional added value. With that, everything runs smoothly!



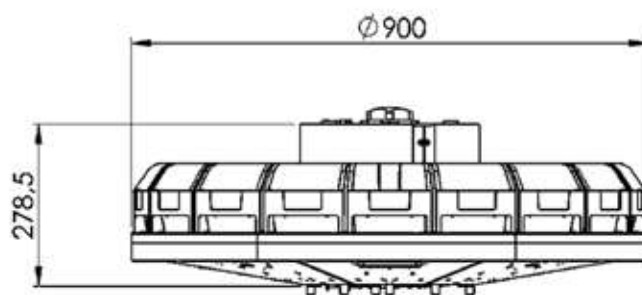
**Quality assurance, supply security through real-time inventory, process optimization with the help of manufacturing and traceability data.**

The all-round package for seamless digitization of the supply chain and assembly processes:

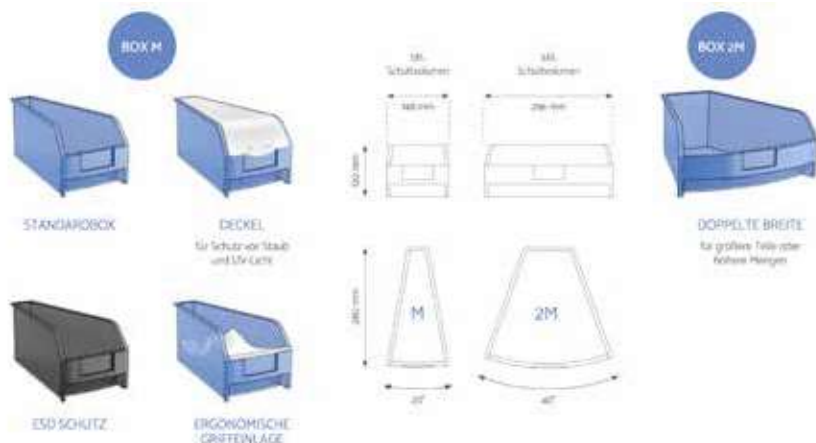
- Pick by Light: guiding your employees with the help of light elements and interactive dashboard
- Pick by Weight: Control of the picked components and their number
- Pick by Access: avoidance of incorrect picks by automatically moving the item forward

**Technical Data**

Height (2 discs)	66 cm
Diameter	90 cm
Safety distance	50 cm
Weight	40 kg per disc (without content)
Scale	exactly 0,4 grams
Power supply	220V (gateway) IP40 24V (disc) IP20
Fuse of the power supply	16A
Ethernet interfaces to ERP, MES possible	



**Different types of boxes**



Digitize your work instructions!

Test the ambos.io WebApp  
30 days for free!  
[www.app.ambos.io](http://www.app.ambos.io)



# AMBOS.IO CONTENT CONTROL

## Inventory recording straight from the assembly line



- Space-saving worker guidance system with integrated scale
- Real-time inventory tracking
- RFID reader for material recognition
- Worker guidance via optional push button and numerical display
- Compatible with standard small load carriers
- Cloud application

### HIGHLIGHTS

The ambos.io ContentControls make it easy to digitize workplaces and assembly stations. Each ContentControl includes a weighing scale that records inventory in real-time and provides an overview of material consumption. If the ContentControls are connected to the <http://ambos.io> WebApp, the worker can be guided through the assembly process. Weight-based verification ensures a stable process and reduces errors.

The integrated RFID reader detects which material is currently present on the ContentControl. This allows a high diversity to be made available even in a small area. The design is compatible with most small load carriers. Retrofit your workstation as required by the respective assembly. The flexibility makes it easy to retrofit existing workstation layouts and offers you high scalability.

A big plus: As an option, the <http://ambos.io> ContentControls can be equipped with a numeric display and push-buttons. A simple way to guide the worker through the work process. The two-digit numeric display shows the quantity to be picked and counts during the picking process. The removal can be confirmed via the push button.



### Inventory recording and worker guidance with Pick by Light and Pick by Weight

People continue to be at the heart of the automation of processes. The worker must be involved in the digitization process, especially in manual work steps. Thanks to the simple integration of the ContentControls, the worker does not have to get used to anything new and can continue to take parts from familiar containers. At the same time, the worker is guided through the work process, which largely secures the work process. The ambos.io ContentControls also offer information that can be used for cross-departmental optimization in the company. A great impact in a small area!



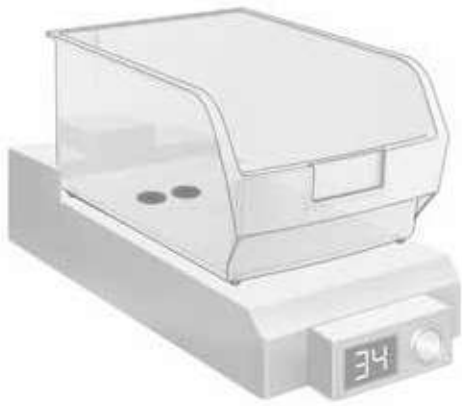
**Quality improvement, more stable processes, and cost reduction through the prevention of errors**

To improve quality, individual components can be tracked via ContentControl. Thanks to the modular structure and space-saving design, no time-consuming conversion is necessary - the ContentControls are ready for immediate use in just a few steps. This saves time and expenditure.  
 The ambos.io WebApp also supports weight-monitored removal and provides feedback on a screen.



**Technical Data:**

Scale	0,4g / part, range 5 kg
max. load capacity	5 kg
any small load carrier with a footprint of	9,7 x 14,2 cm
Display and push button numbers	2-digit, negative numbers



**Connections:**

Mains supply	24 V
Connectors	24 V terminal block
Ethernet gateway oder LTE gateway interface to ERP, MES possible	



Digitize your work instructions!  
 Test the ambos.io WebApp  
 30 days for free!  
[www.app.ambos.io](http://www.app.ambos.io)



FATH



ambos.io

## AMBOS.IO STOCK MONITORING SENSORS

Efficient use of storage space thanks to real-time data



- Battery powered
- Dirt-resistant and low-maintenance
- Wireless installation
- Can be attached to the floor, wall, and ceiling
- Cloud-based application
- Digital dashboard with real-time displays
- Can be connected to other systems such as signal lights

### HIGHLIGHTS

The ambos.io Stock Monitoring Sensors transmit the status of inventory in your warehouse and usable space - wirelessly and in real-time. The status can be viewed via our intuitive dashboard or integrated into your existing system.

The ambos.io Stock Monitoring Sensor - Detect height differences and send the data to the ambos.io Cloud. As soon as a defined height is exceeded or not reached, a message is sent or color-coded in the digital dashboard. The ceiling sensor has an integrated LED that indicates the current occupancy status. On the software side, the sensors can also be integrated into other existing illuminated displays.

The ambos.io Stock Monitoring Sensor - A floor sensor detects whether a space is free or occupied. As soon as an occupied space becomes

free again, this is displayed in color on the dashboard.

The floor sensors are waterproof, they withstand extreme temperatures, and are therefore also designed for outdoor use. The sensor can also tolerate forces, such as those exerted by ground vehicles without difficulty.

The ambos.io Stock Monitoring Sensors work wirelessly, are easy to install and ready for immediate use!

The sensors can be mounted on the ceiling, a wall, or floor using various mounting options.

### EASY WIRELESS INSTALLATION



### Transparent and more efficient use of logistics space

With the Stock Monitoring Sensors, you can easily optimize your storage spaces and thus your internal walking distances as well as the delivery and ordering processes. Goods receipts for inbound deliveries and materials are tracked by the sensors according to current inventory.

The bonding process allows fast and non-damaging installation - without the need to lay cable ducts or drill holes in floors or ceilings. The installation can be performed without interrupting operations.



### STOCK MONITORING SENSOR - Floor

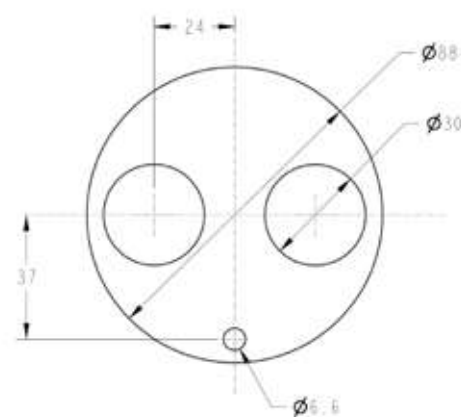
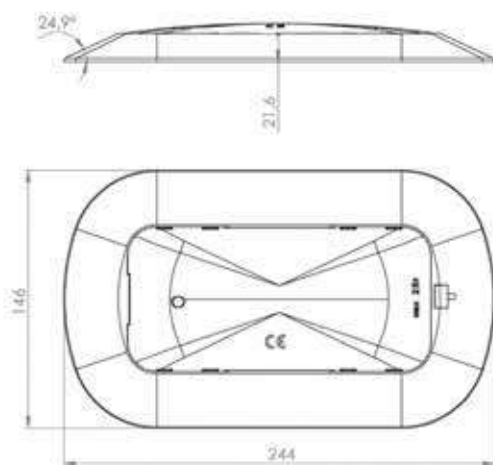
The floor sensor is fixed to the floor by gluing.

Max load	2,5t (area load of pneumatic vehicle)
Operating temperature	up to 75°C
Energy supply	Lithium primary battery
Battery life	approx. 5 yrs
Detection technology	cloud-based magnetoresistive detection (measurement interval 4 sec)
Transmission technology	LoRa: 868 MHz (via gateway)
Transmitting power	LoRa: <13 dBm (<20 mW)
Protection class	IP67
Sensor housing material	PBT-GF20, UL94 V-o flame retardant, black
Outer ring material	PC-ABS, signal yellow (RAL1003)

### STOCK MONITORING SENSOR - Distance

The ceiling sensor can be fixed to the wall, ceiling, or floor with the magnetic bracket or by gluing.

Weight	approx. 200 grams
Operating temperature	up to 75°C
Energy supply	replaceable lithium primary battery
Battery life	approx. 5 years (without using the integrated LED light)
Detection technology	cloud-based magnetoresistive detection (measurement interval 4 sec)
Transmission technology	LoRa: 868 MHz
Transmitting power	LoRa: <13 dBm (<20 mW)
Protection class	IP64
Material	PC-ABS / UL94 V-o flame retardant, black



Digitize your work instructions!

Test the ambos.io WebApp  
30 days for free!  
[www.app.ambos.io](http://www.app.ambos.io)