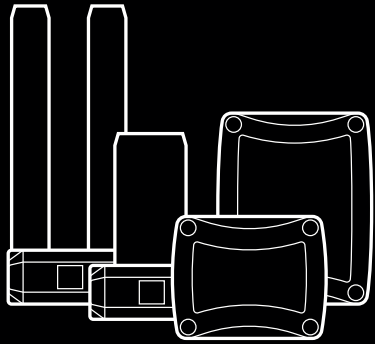# lowpad®

We like to move it, move it

The Lowpad is a smart autonomous mobile robot

The Lowpad is a unique high-tech solution to optimize internal logistic and distribution processes in all types of businesses. It is equipped with independent driven steering wheels and a multifunctional Lidar camera system in order to operate autonomously. The Lowpad can be operated without any modifications to the existing infrastructure.

Functions

The Lowpad is a unique mobile robot which distinguishes itself from other system by its unique characteristics.

Ultralow robot

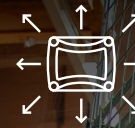The Lowpad is the lowest autonomous mobile robot available on the market.

Collaborative robot

The Lowpad works safely with people due to its certified safety scanners.

Gentle and safe transport

The Lowpad ensures a gentle and safe transport of goods.

Omnidirectional driving

All wheel steering gives the Lowpad the ability to move in any required direction.

20% storage increase

Compared to traditional systems, Lowpad offers a storage increase up to 20%.

Suitable robot for each job

A mix of different Lowpad models can work simultaneously in one environment.

Camera positioning and surround scan system

Camera combined with Lidar technology for accurate positioning and safety protection.

Automatic order picking

Manual and automatic order picking at the same time and place.

Regenerate energy

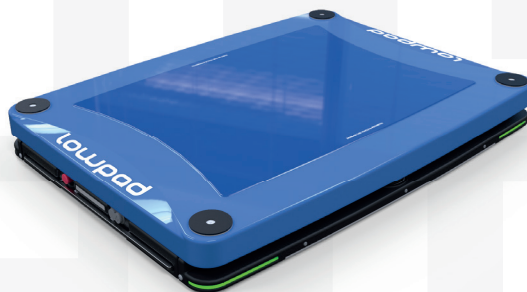The Lowpad regenerates energy when it slows down.

In-house developed software

Complete solution with in-house developed fleet manager software. This guarantees our clients a high-quality combination of the Lowpad with software that meets their needs.

Lowpad M

Lowpad L

Lowpad S

Lowpad K

Lowpad P

Lowpad F

Lowpad M

The Lowpad M is most suitable to move trolleys, pickcarts and tools.

The Lowpad M is a one of a kind mobile robot because of the ultra-low chassis and omnidirectional driving. It makes the Lowpad highly suitable to move load carriers with a minimum height between the cart and floor.
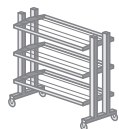
Technical specs

⋈ **Dimensions**
800 x 665 mm
31.5 x 26.2"

Ⅰ **Height**
128 mm
5"

Suitable for:

Trolleys   Pickcarts   Tools

Lowpad L

The Lowpad L is most suitable to move roll cages, movable racks and tools.

The Lowpad L is, just like the Lowpad M, a smart mobile robot in an ultra-low chassis. It complements the Lowpad Family with its own unique characteristics. The Lowpad L, is even wider than the Lowpad M and because of its minimum height, highly suitable to move ultralow roll cages, movable racks and tools.

Technical specs

⋈ **Dimensions**
800 x 1075 mm
31.5 x 42.3"

Ⅰ **Height**
128 mm
5"

Suitable for:

Roll cages   Movable racks   Tools

Lowpad K

The Lowpad K is provided with a small lifting table and therefore suitable to move dollies and small load carriers.

The Lowpad K is one of a kind, because of the small lifting table. It's an unique feature that results in autonomous movements of small dollies and other small load carriers.

Technical specs

⬡ **Dimensions**
1140 x 610 mm
44.9 x 24.0"

I **Height**
1200 mm
47.2"

Suitable for:

Dollies

Lowpad S

The Lowpad S is provided with a wide lifting table and therefore suitable to move heavier roll cages.

The Lowpad S is highly suitable for distribution centers and warehouses which use several types of roll cages. This Lowpad model is provided with a wide lifting table.

Technical specs

⬡ **Dimensions**
1200 x 700 mm
47.2 x 27.6"

Ⅰ **Height**
1200 mm
47.2"

Suitable for:

Roll cages

Lowpad P

The Lowpad P is a compact robot which acts as an agile high-speed runner within any warehouse environment.

Totes with a maximum size of 600 x 400 x 200 mm *(23.6 x 15.7 x 7.9")* can be placed on the Lowpad P. The Lowpad P is highly flexible and able to move filled totes to a destination station. Totes can be loaded manual, with a robot or by using a conveyor belt.

Technical specs

⤬ **Dimensions**
750 x 450 mm
29.5 x 17.7"

⌶ **Height**
220 mm
8.7"

Suitable for:

Totes

Lowpad F

The Lowpad F is the ideal autonomous mobile robot for the transportation of pallets.

The Lowpad F is provided with two lifting forks. This Lowpad is suitable for many applications where product variability, delivery time and efficiency are key. The Lowpad F is equipped with independent driven steering wheels and a multifunctional Lidar camera system in order to operate autonomously.

Technical specs

⋈ **Dimensions**
1670 x 800 mm
65.7 x 31.5"

I **Height**
675 mm
26.6"

Suitable for:

Pallets

Lowpad specials

We developed and produced several customized Lowpads based on clients needs.

The Lowpad is highly suitable for many applications and load carriers. But some clients are looking for a customized AMR / AGV which fulfills their specific wishes. In close cooperation with clients, Eurotec is able to develop customized Lowpads and logistic systems.

Special request

Get in touch with Eurotec to discuss your specific project.

Technical highlights

No adjustments needed to your environment

The Lowpad is computer controlled. It communicates via a warehouse control system and offers a dynamic routing and re-routing, depending on the different inputs and circumstances. There are no adjustments needed to your specific environment.
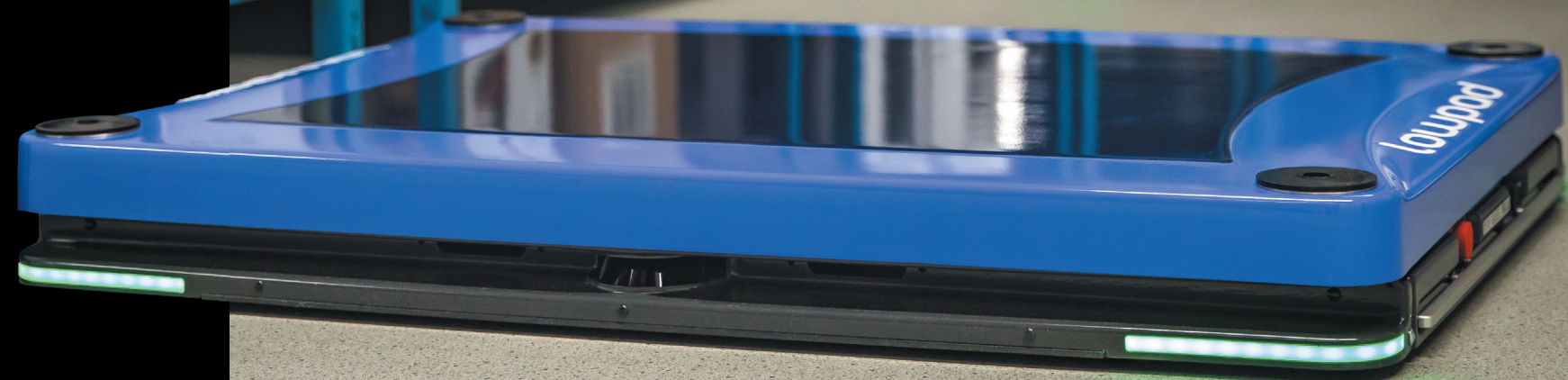
Built-in long life battery
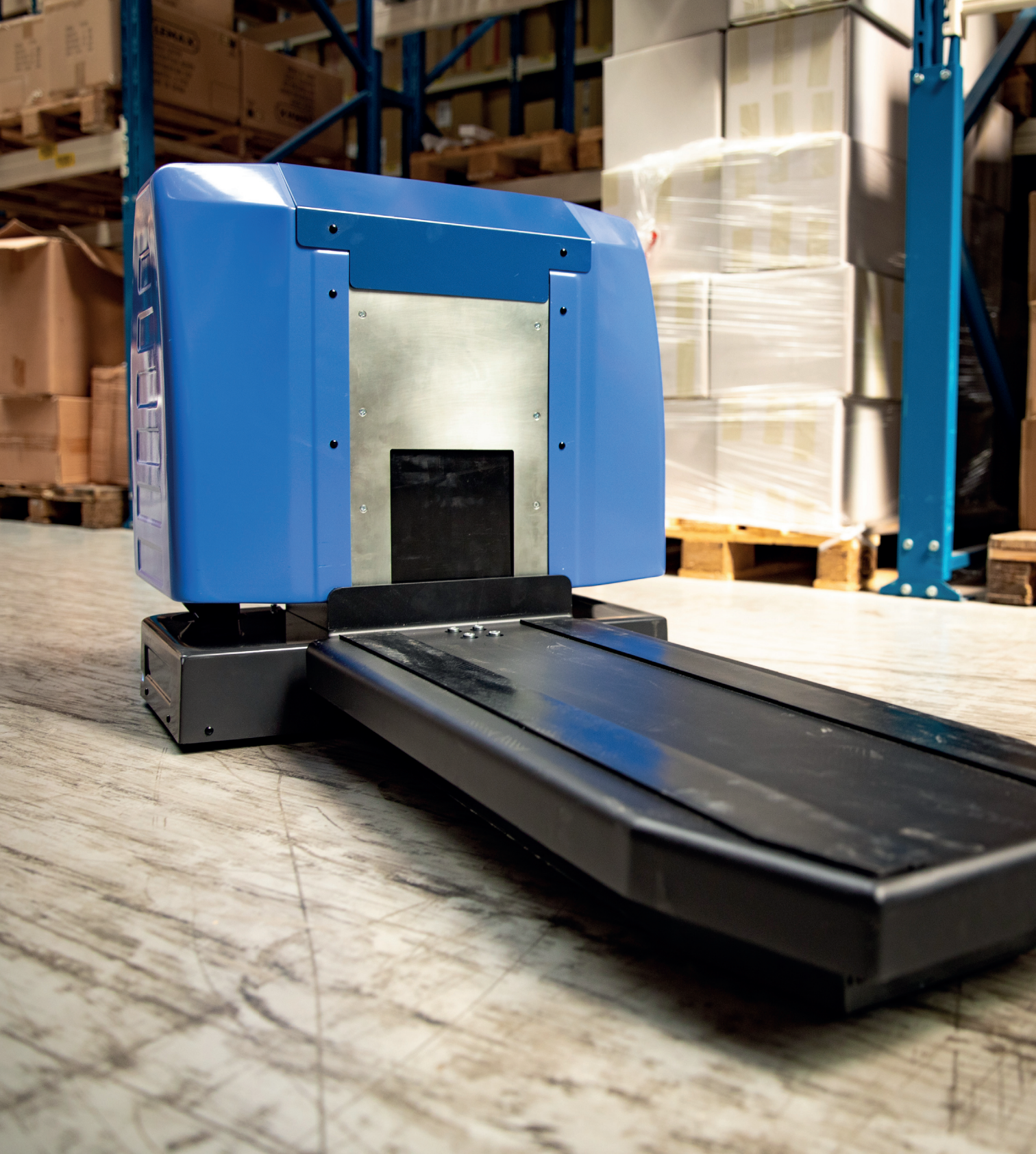
Vehicle track-and-trace

Smart, camera-supported target approach

WIFI communication

Charging of partly discharged batteries is permitted

No floor-related infrastructure is required

Lidar assisted collision prevention

Complete solution with in-house developed fleet manager software

Moving fast and accurately from A to B at the lowest costs. That is what matters in logistics. Eurotec contributes and provides a reliable software system for fleet management and detailed insight into all relevant information about your logistic processes. Connection with relevant neighboring systems such as warehouse management system or ERP systems can be provided.

Implementing a robotized warehouse system requires a sophisticated integration between the warehouse management system and the movements of the Lowpad. With Supervisor and Organiser, we provides an intelligent and flexible solution to implement a fully autonomous mobile robot environment.

lowpad organiser

Custom integration layer. Integration on ERP, WMS or WCS level.

lowpad supervisor

Supervisory software for efficient operation of a Lowpad fleet including job management and traffic regulation.
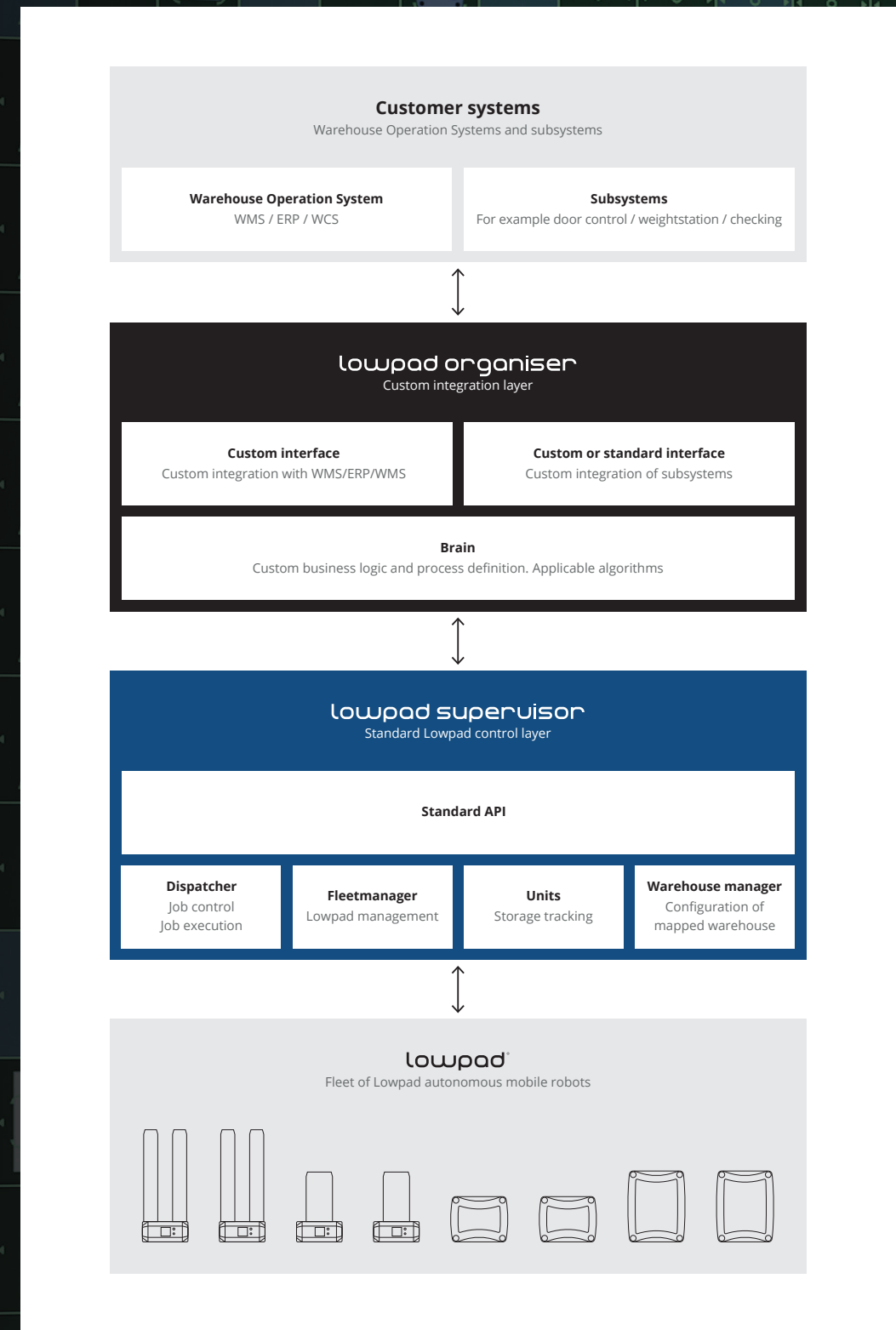
Organiser

Organiser works as a process control system and is a project-oriented software solution intended as an integration system between Supervisor and the customer's warehouse management system or ERP

It will also integrate other subsystems (e.g. weighing and scanning) in a completely automated environment. The flexible framework of Organiser works on software plug-ins. An event handler will process internal and external triggers to either push moves to Supervisor or collect data from subsystems and send feedback to the warehouse management system. Organiser has its own database to store workflow and (temporary) external data.

In addition, Organiser is equipped with an intelligent mechanism which will combine all relevant data that the Organiser collects from the connected (sub)systems, such as planning data, preconfigured parameters, warehouse locations, and real-time changes. All of this data will be analyzed and converted into an events/tasks planning which will be carried out by the Lowpads in an optimal sequence. The combination of Supervisor and Organiser will ensure an adaptive process including optimization of the automated warehouse process.

Depending on the automation capabilities of the customer's warehouse management system, Organiser can be an optional module, a limited feature, or a complete part of the AGV installation.

Customer systems
Warehouse Operation Systems and subsystems

Warehouse Operation System	Subsystems
WMS / ERP / WCS	For example door control / weightstation / checking

lowpad organiser
Custom integration layer

Custom interface	Custom or standard interface
Custom integration with WMS/ERP/WMS	Custom integration of subsystems

Brain
Custom business logic and process definition. Applicable algorithms

lowpad supervisor
Standard Lowpad control layer

Standard API

Dispatcher	Fleetmanager	Units	Warehouse manager
Job control Job execution	Lowpad management	Storage tracking	Configuration of mapped warehouse

lowpad
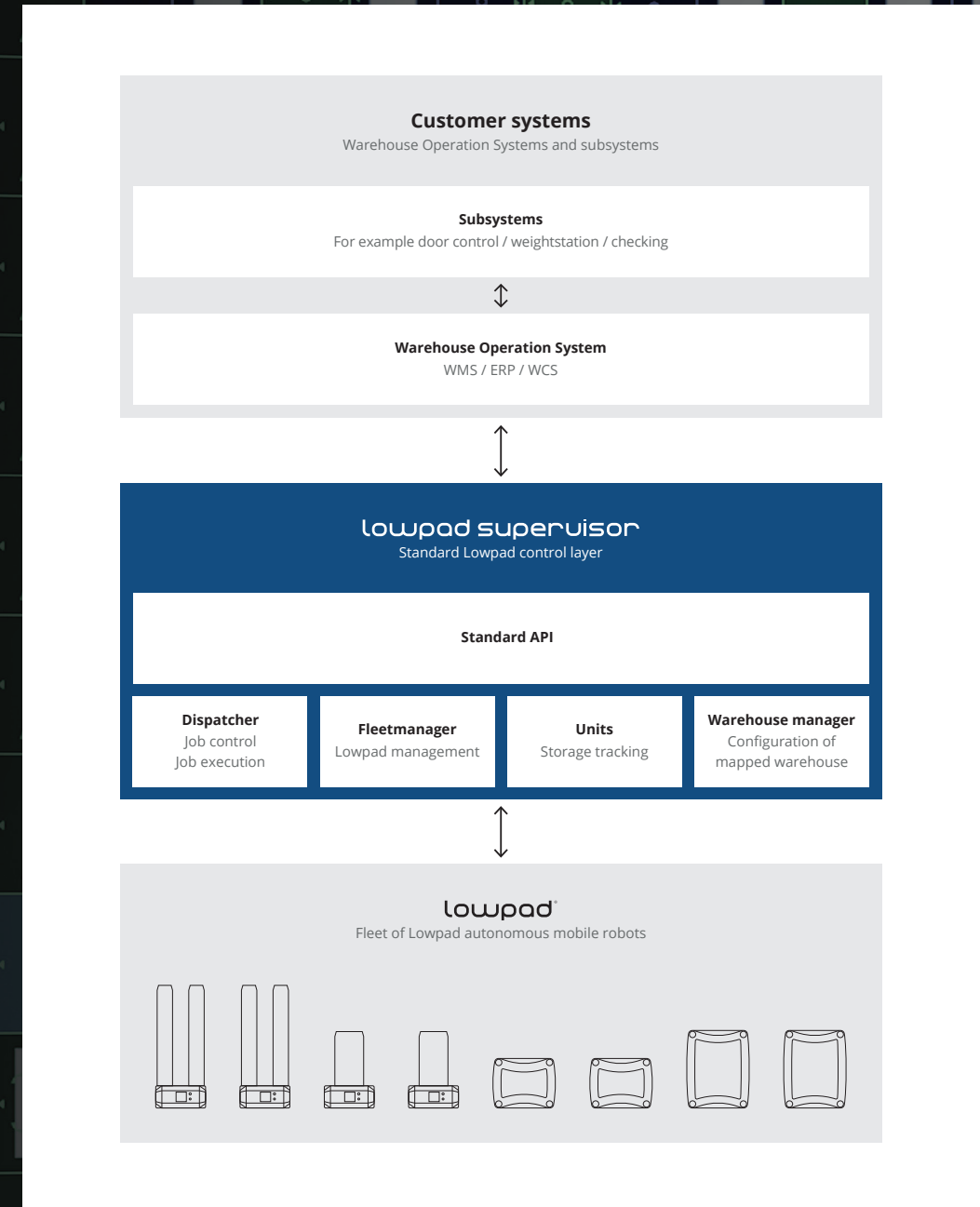Fleet of Lowpad autonomous mobile robots

Supervisor

Our software product that will manage your fleet of Lowpads

The first layer, called Supervisor is a software product that is delivered in conjunction with the Lowpad. Supervisor has been developed as a standard software solution to manage the Lowpads, Warehouse grids, and job execution. Supervisor comes standard with an Lowpad implementation.

Contains:

- A configurable collection of different types of Lowpads
- The ability to monitor and manage status information
- Warehouse grids
- Mapping of logical and absolute positions
- Routing rules and restrictions
- A list of moves that must be executed
- A dispatcher function that assigns moves to equipment
- Exception handling for manual adjustment
- An integration layer (drivers) for the Lowpads
- A standard integration layer (API) for data exchange with Warehouse Control System / ERP

Customer systems
Warehouse Operation Systems and subsystems

Subsystems
For example door control / weightstation / checking

⇕

Warehouse Operation System
WMS / ERP / WCS

⇕

lowpad supervisor
Standard Lowpad control layer

Standard API

Dispatcher	**Fleetmanager**	**Units**	**Warehouse manager**
Job control	Lowpad management	Storage tracking	Configuration of
Job execution			mapped warehouse

⇕

lowpad
Fleet of Lowpad autonomous mobile robots

About Eurotec

Eurotec is an international operating industrial company dedicated to the development, production and sales of high-tech equipment solutions for logistics.

Within the group, Eurotec can draw from a broad experience of already developed equipment. This provides an important contribution for clients to facilitate the development of processes. This combination results in high-tech equipment that supports and optimizes clients business processes. It makes Eurotec a target oriented and highly reliable partner.

Eurotec specializes in:

- High-quality robotic equipment for value added logistic processes like autonomous mobile robots for warehouse and logistic solutions and order fulfilment.
- In-house developed fleet manager software.
- Special custom-made automation solutions.

Visit eurotec.com

We like to move it, move it
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Ya like to move it

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