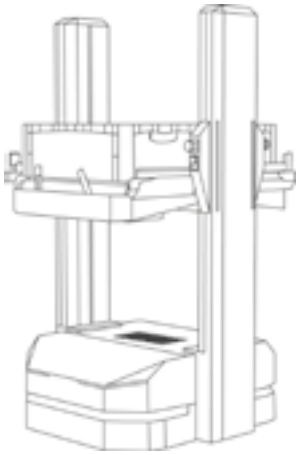


Open Shuttle

The new flexibility



Automate the increasing number of transport processes with our autonomous mobile robots, the Open Shuttles.

As an alternative or complement to classic conveyors, the Open Shuttles provide new opportunities for making your flow of goods even more flexible. The autonomous mobile robots move containers, cartons, trays and pallets around the warehouse. What makes these clever helpers special is that they don't require any artificial landmarks or other aids. Instead, they find their way using intelligent software and sensor technology. As a result, no construction or remodeling is needed to install the system. The Open Shuttles are ready to go in just a few days, making them highly suitable for integration into existing systems. Because of their flexibility and ability to work as an intelligent swarm, the AMRs can be used for a range of different tasks.

Thanks to the intelligent fleet management system, orders are flexibly distributed across the entire fleet in a way that makes sense. The software allocates orders and perfectly coordinates the traffic flow, even when the robots meet other vehicles. It also ensures that transport capacities are coordinated in a smart and agile way, at exactly the right time and in exactly the right place. Therefore, Open Shuttles are ideal not only for the just-in-time supply of work stations and production lines, but also for any other type of internal transport.

Advantages

- **Simple simulation and control of the layout, processes and fleet; changes can be made independently**
- **Flexible connection of all warehouse areas**
- **Easy integration into an existing system without requiring structural modifications; quick and easy startup**
- **Smart path planning and intelligent coordination of orders and transport resources**
- **Cost-efficient use thanks to 24/7 availability, no changes in performance, low maintenance and servicing costs**
- **Autonomous, robust, deterministic navigation; compatible with VDA 5050**
- **Safe interaction between humans and machines thanks to 3D obstacle detection**
- **Global service network and reliable partner**
- **Keeps paths clear**

Open Shuttle

Facts and figures







	Open Shuttle 50		Open Shuttle 50 with integrated width adjustment		Open Shuttle 100		Open Shuttle Boxgrip	Open Shuttle Fork
Max. speed in m/s (ft/s)	1.5 (4.92)		1.5 (4.92)		1.5 (4.92)		1.5 (4.92)	1.5 (4.92)
Load-handling device	Roller conveyor system		Roller conveyor system		Roller conveyor system		Gripper	Lifting forks
Transport objects	Containers, cartons, trays		PCB magazines, containers, cartons, trays		Containers, cartons, trays		Containers with side openings	Pallets (EUR-pallets, CHEP-pallets, industrial pallets, half pallets), frames, racks, special load carriers
Max. dimensions of transport object in mm (in)	600 x 400 (23.62 x 15.75)		410 x 400 (16.14 x 15.75) magazines, 600 x 400 (23.62 x 15.75) containers		900 x 650 (35.43 x 25.59)		600 x 400 (23.62 x 15.75)	1,200 x 1,200 (47.24 x 47.24) Larger upon request
Payload in kg (lb.)	120 (264.55)		50 (110.23)		120 (264.55)		50 (110.23) (25 (55.12) per container)	1,300 (2,866.01)
Integrated lifter (extra feature)	Yes	No	Yes	No	Yes	No	Yes	Yes
Pickup and delivery height in mm (in)	550 to 1,500 (21.65 to 59.06)	500 to 1,000 (19.69 to 39.37)	550 to 1,500 (21.65 to 59.06)	500 to 1,000 (19.69 to 39.37)	550 to 1,500 (21.65 to 59.06)	500 to 1,000 (19.69 to 39.37)	0 to 1,00 (0 to 39.37) Depends on container height	0 to 1,200 (0 to 47.24)
Battery life (h)*	7		7		7		7	8
Configuration	Server laptop, charging station, positioning triangle, remote control, storage location sensor, blue light, brushes, ESD-compliant						Server laptop, charging station, positioning triangle, remote control, integrated lifter, storage location sensor, blue light, brushes, ESD-compliant	Server laptop, charging station, remote control, blue light, 3D obstacle detection, brushes, top scanner, integrated lifter
Extras features	3D obstacle detection, integrated lifter, top scanner						3D obstacle detection, top scanner	Barcode detection
Accessories	Flow racks, transfer locations						-	CHEP-pallet adapter
Certification	CE-certified							
Communication	WLAN b/g/n Standard							
Software	Fleet manager, user interface, host interface, VDA 5050							
Installation	Installation by KNAPP, DIY installation							

*no Opportunity Charging

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