

## TRANSPORT VEHICLE ACTIVE SHUTTLE 2.1



### ACTIVE Shuttle

- ▶ Automated transport of dollies (600x400 mm)
- ▶ Comprehensive safety concept, designed for continuous 24/7 mixed operation with humans and machines
- ▶ Increased safety through camera-based 3D obstacle detection
- ▶ Touchscreen display
- ▶ Thanks to the robust laser navigation system, there is no need to change the factory infrastructure
- ▶ Transports payloads up to 260 kg
- ▶ Fully automated loading and unloading with the integrated lifting platform
- ▶ Navigates safely around obstacles
- ▶ Highest safety thanks to lithium-ion battery with Performance Level C

The autonomous transport system ACTIVE Shuttle is making entry into the factory of the future possible already today: It can be put in place quickly without changing your existing factory infrastructure. It is also intuitive, fully networked and, with safety laser scanners plus 3D obstacle detection, safe for use around people! ACTIVE Shuttle automates and standardizes your in-house

material and goods flow. Transport your dollies loaded with small load carriers (KLT) in a highly flexible and secure manner. ACTIVE Shuttle implements many transport concepts, from cyclical to consumption-based material supply systems. With automated loading and unloading, manual handling tasks will now be a thing of the past!

### Required accessories

- ▶ Software license AMS, 1-year license, per vehicle (3842560814)

### Recommended accessories

- ▶ Charging station ACTIVE Shuttle 2.1 (3842560107)
- ▶ Frame charging station ACTIVE Shuttle 2.1 (3842560108)
- ▶ ACTIVE Shuttle 2.1 battery (3842560570)
- ▶ Controller for manual operation of the ACTIVE Shuttle (3842560206)
- ▶ Blue line for accurate positioning (3842560612)

### Ordering information

Product description	Material number	Delivery unit
TRANSPORT VEHICLE ACTIVE SHUTTLE 2.1	3842560099	1

## Technical data

Material number		3842560099
ESD		Yes
Conduction resistance	RA	$1 \times 10^4 \Omega \leq R_v \leq 1 \times 10^9 \Omega$
Positioning accuracy	mm	< 100 mm regular
Gradients	%	2.5% (forward drive)
Type of battery		Lithium-ion battery with PL c
Charging time	min	Approx. 80 (from 20% to 80%)
Charging/runtime ratio		1:5
Wi-Fi		IEEE 802.11.ac/a/b/g/n
Encryption		64/128 bit WEP, WPA, WPA2 Personal, WPA2 Enterprise
Certificates		EAP-PEAP, -TLS, -TTLS, -LEAP
CE conformity		Yes
Navigation technology		Laser navigation by natural landmarks
Localization and map creation		SLAM algorithm based on laser and odometry data
Number of navigation sensors		1x front safety laser scanner
Number of safety laser scanners		1x front, 1x rear (safety laser scanner PLd)
Dolly detection		Inductive safety sensor
3D obstacle detection		2 stereo cameras
Speed v <sub>max</sub> forward	m/s	1
Max. threshold height of industrial flooring	mm	6
Max. joint width of industrial flooring	mm	15
Humidity	%	5...85, non-condensing
Ambient temperature	°C	+5...+40

The data specified within only serve to describe the product. As our products are constantly being further developed, no statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.