



***XS1**core*

MOBILE TRANSPORT ROBOT

DATASHEET

SAFELOG

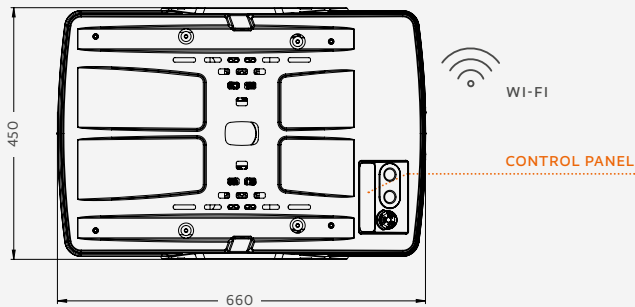
GENERAL INFORMATION

The SAFELOG XS1 mobile robot is specially designed for fulfillment requirements. With its speed of up to 4 m/s, it is the perfect solution for minimizing transport times between pick port and packing station. As the chassis is mounted on an oscillating bearing, the XS1 can also negotiate ramps with a gradient of up to 5%, depending on the project, gradients of up to 18% may be possible⁵. A differential drive enables it to turn on the spot. Communication is realized via Wi-Fi.

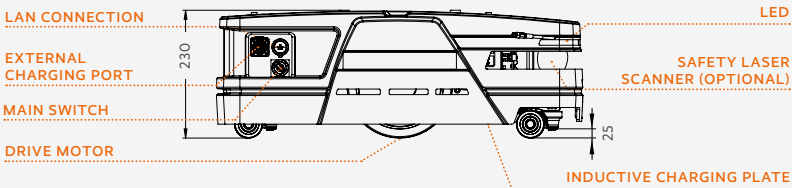
DEVICE INFORMATION

Product name	SAFELOG XS1 core
Casing material	Aluminium/technopolymers
Weight (kg)	41

XS1 CORE TOP VIEW



XS1 CORE SIDE VIEW



dimensions in millimeters

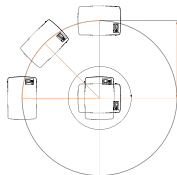
Pictures and drawings may show optional accessories or previous device versions. Specific configuration according to offer. We reserve the right to modify product specifications without prior notice.

TECHNICAL DATA

PERFORMANCE	Standard	Optional
Topload level/grade (kg)	85/50 ¹	—
Lifting height (mm)	—	—
Speed (m/s)	0.1 – 4 ^{1,2}	—
Positioning accuracy (mm)	+/- 5 ^{1,3}	—
Localization	Odometry, grid codes	LiDAR (LLS)
Sensors	—	—

ELECTRICAL DATA	Standard	Optional
Charging system	Inductive	—
Battery type and (quantity)	LiFePO4 (1)	—
Capacity (Ah)	21	—
Operating voltage (V)	24	—
Charging time 20–80% (min)	20 ¹	—
Continuous driving (with[out] payload) (h)	[6] 4.5 ^{1,4}	—

SAFETY DEVICE		OPERATION DATA	
Personnel safety (optional)	Safety laser scanner	Temperature (°C)	+5 to +35
Emergency stop	Front	Conformity (planned)	CE, FCC, IP54
LED-Strip	Front	Max. grade (%)	5 ^{1,5}
Bluespot	—	Operating time (h/d)	24/7
		Floor condition	VDI 2510



Turning radius (m):
0.8

¹ environment-dependent

² without optional accessories

³ dependent on localization method

⁴ at linear speeds of 2.0 m/s without acceleration,
load of 50 kg, 80% driving share

⁵ Ramp runs (permitted in the forward direction only) with
gradients of 5% < x < 18% require project-specific approval.

XS1 CORE



Standard



Top view with control panel



Connections and main switch



Safety and warning fields

XS1 CORE PERIPHERALS



Charging station*



Charging plate (inductive charging)*



Bin transportation as a use case (max. 600 × 400 mm)



XS1 IntelliCart as a use case

* the XS1 uses a smaller charging plate

