TUSKROBOTS
EUROPE

TUSK ES

Smart pallet-handling robot



Technical specifications

Basic parameters

Overall dimensions	**1,312 × 1,060 × 170 mm**
Maximum lifting weight / self-weight	**1,000 kg / 320 kg**
Fork height / extension distance	**90 mm / 1,400 mm**
Maximum lifting height	**≤330 mm**
Turning width	**1,900 mm**
Display	**5 inches**
Wireless communication	**2.4 / 5 GHz; IEEE 802.11a/b/g/n**
Operating temperature	**0-45 °C**

Movement capability

Navigation	**SLAM + DM code**
Movement mode	**Two-wheel differential**
Maximum speed	**1.5 / 1.2 m/s**
Stop accuracy	**±20 mm / ±2°**
Maximum gap / step	**40 mm / 10 mm**
Maximum slope	**4°**
Slope, forks extended	**2°**

Safety protection

Obstacle detection	**Front + rear laser sensors; 360° detection**
Front laser range	**0-3 m**
Mechanical protection	**Emergency stop, reset button, full-body protection strip**
Alarm functions	**Voice and visual alarms**
Fork tip protection	**Collision switch**

Lithium battery performance

Battery type	**LFP ($LiFePO_4$)**
Voltage / capacity	**51.2 V / ≥28 Ah**
Endurance	**≥8 h**
Charging time	**≤2 h**
Battery life	**1,500 full cycles**

Pallet requirements

Slot widths	**W1 ≤160 mm; W2 600-900 mm**
Length, DM code	**≤1,400 mm**
Length, SLAM	**≤1,300 mm**
Opening height	**95-130 mm**