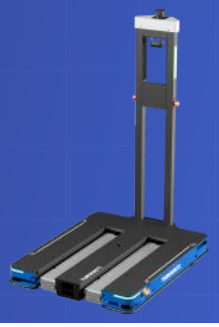
TUSKROBOTS
EUROPE

TUSK ES-H

Pallet-handling AGV with safety tower



Technical specifications

Basic parameters

Dimensions	**1,455 × 1,060 × 170 / 1862 mm***
Maximum lifting weight / self-weight	**1,000 kg / 340 kg**
Fork height / extension distance	**90 mm / 1,400 mm**
Maximum lifting height	**≤330 mm**
Turning width	**1,900 mm**
Wireless communication	**2.4 / 5 GHz; IEEE 802.11a/b/g/n**
Operating temperature	**0-45 °C**

* Total height including the tower

Movement capability

Navigation	**SLAM + DM code**
Movement mode	**Two-wheel differential**
Speed, unloaded / loaded	**0-1.5 / 0-1.2 m/s**
Rated acceleration	**1 m/s²**
Stop accuracy	**±20 mm / ±2°**
Maximum gap / step	**40 mm / 15 mm**
Maximum slope	**4° (7%)**
Slope, forks extended	**2°**

Safety protection

Obstacle detection	**Dual front + dual rear lasers; 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**
Safety level	**PLd**
Safety tower	**Additional laser scanner**

Lithium battery performance

Battery type	**LFP ($LiFePO_4$)**
Voltage / capacity	**51.2 V / 30 Ah**
Endurance	**≥8 h**
Charging time	**≤2 h**
Battery life	**1,500 full cycles**

Pallet opening height

At 800 kg load	**95-130 mm**
At 1,000 kg load	**115-130 mm**

Operation

VDA integration and cluster scheduling supported.