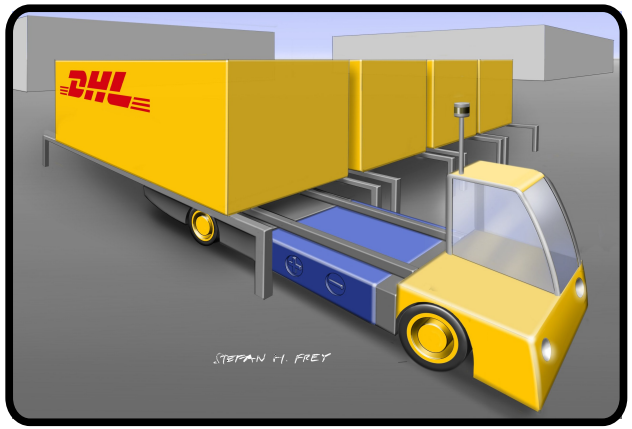
Assisted Maneuvering and Positioning System

AMPS



Key facts

Automation	Autonomous lateral and manual longitudinal control
Adaptability	Majority of container, trailer, loading dock and vehicle types
Goal Detection	LiDAR based without artifical landmarks
Localisation	Fusion of LiDAR, GNSS, IMU and encoder
Planning and Control	Every manouver achievable by the vehicle
Graphical User Interface	Video based augmented reality
Acoustical User Interface	LiDAR based distance feedback
Robotic Framework	Robot Operating System (ROS)
Safety	Safety Concept developed with the Institute for Occupational Safety and Health of the German Social Accident Insurance

Performance

Operational Approval	Tested on German DPDHL Yards
Operational Range	1m to 50 m
Operation Environment	All-day outdoor and indoor conditions
Light Conditions	Complete darkness or direct sunlight
Angular Precision	0.17°
Lateral Precision	< 3 cm
Max. Maneuvering Speed	< 10 km/h
Max. Slope	2.5%
Temperature Range	-20°C to +45°C

STREETSCOOTER