



TractEasy Datasheet



Operational characteristics

| Item | Description |
|--|--|
| Trademark | TractEasy |
| Type of vehicle | Electric automated Tow Tractor |
| Vehicle driving automation | Level 4-5 – High Automation (According to SAE J3016) |
| Driving modes | Autonomous mode, Assisted Manual mode, Manual mode and Inching mode. |
| Driving directions | Forward only in Autonomous mode Both directions in manual mode (rear speed reduced) |
| Service operation modes | Non-stop on loop, Scheduled or On-demand |
| Supervisory Control System for fleet | Available with EZ Maestro, EasyMile Fleet Manager System |
| Scalability | Cloud based architecture ready to scale up a large fleet of vehicles |
| IT integration | Existing APIs to interact with third-party systems (e.g. WMS) |
| Infrastructure segregation requirements | None, can operate on shared road in mixed traffic conditions |
| Times of Operation | Up to 24h/24 <i>Battery swap time or opportunity charging time to be considered</i> |
| Track Length | No limitations |
| Energy Management | Battery swap with Lead-Acid technology Opportunity charging with Li-ion technology |
| Temperature constraints | Temperature in operations: -20°C / +45°C Temperature in storage: 0°C / 35°C |

Technical characteristics

| Item | Description |
|---|--|
| Chassis & Frame | Steel |
| Net Vehicle Weight | Without battery: 2 060 kg With Lead/Acid battery 80V / 620Ah: 3 640 kg With Lead/Acid battery 80V / 620Ah and ballast: 3 900 kg |
| Max. Tow Capacity | 25 000 kg |
| Drawbar Pull | Option: 2000 daN (4500 lbf) |
| Length | 3 200 mm |
| Width | 1 840 mm |
| Height | 2050 mm |
| Minimum Turning Radius without trailer | Between sidewalks: 3 070 mm Between walls: 4000 m |
| Wheelbase | 2,480 mm |
| Wheel space | 1,160 mm |
| Ground clearance | Approx. 150 mm |
| Energy | Electric |
| Battery type | Lead/Acid or Li-ion by default, other types possible Dimensions: 1015 x 680 x 805 mm |
| Battery Capacity | Lead-Acid: 50 kWh Li-ion: from 22kWh to 66 kWh |
| Charging time | Depend on battery capacity, technology and charger. Usually: - 8 hours for Lead/Acid battery 50kWh (40% to 100%) - 1.5 to 2 hours for Li-ion (10% to 100%) |
| Power | 27 kW nominal |

| | |
|------------------------|---|
| Transmission | 2 wheel drive |
| Direction | 2 steering wheels (electro hydraulic) |
| Max. speed | 25 km/h |
| Service brake | Redundant electrical (regenerative) and hydraulic (on disc) brakes with independent circuits (front/rear) for maximum safety |
| Parking brake | Calipers electrically piloted (one per wheel) |
| Emergency brake | Fail-safe brake |
| Wheel rims | Front: 6.50 R10 wheels Rear: 7.00 R12 wheels |
| Lights | Projectors, indicators, daytime running light, stop lights, retro-reflectors, backwark lights and rear working light. |
| Connectivity | GSM / EDGE / UMTS / LTE modem 2.4 Ghz Wi-Fi modem V2I module (optional) |
| User Interfaces | 1 x Interactive touchscreen tablet 7" 1 x Destination panel 5 x Emergency stop buttons Audio & visual warning alarms Video with supervision Rear inching buttons for manual approach |

Embedded technology

| Item | Description |
|--|--|
| Components for Localization | Hybrid localization technology combining odometry, inertial measurement unit, LIDAR, radar, GNSS and cameras |
| Components for safety functions | Safety LIDARs matching european regulations requirements Detection LiDARs and cameras Emergency stops Audio & visual warning alarms |
| Communication Features | Permanent 3G or 4G connection to EasyMile cloud infrastructure High speed WiFi connection for large upload/downloads Vehicle to Infrastructure communication |
| Operator information systems | Operator interface display |

Options

| Item | Description |
|--|--|
| Equipment | Tool kit for vehicle setup Several hitches available to match the existing trailers |
| Communication with Infrastructure | V2I communication module to enable communication between the TractEasy and the infrastructure (traffic lights, doors, barriers etc...) |
| Design | Custom painting, stickers |
| Battery | Lead-Acid Battery 50 kWh Li-ion Battery: 22 kWh, 44 kWh, 66 kWh |