

# TPL251

## LOW LEVEL ORDER PICKER 2.5T

 2500 kg  120 mm  24 V



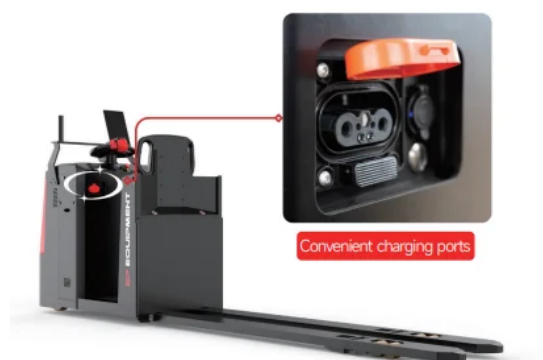
The TPL251 is the ideal solution for high-volume order picking and long-distance horizontal transport in distribution centers, retail logistics, and manufacturing supply chains. Designed for low-level order picking, it allows operators to efficiently collect goods along aisles while maintaining excellent control and visibility. With walk-along side buttons for precise truck movement and an ergonomic suspended platform, the TPL251 enhances both productivity and operator well-being in demanding warehouse operations.

| SPECIFICATION                               | REF                            | UNIT | VALUE        |
|---|--------------------------------|------|--------------|
| Battery nominal capacity                    |                                | Ah   | 280          |
| Battery voltage                             |                                | V    | 24           |
| Load capacity                               | Q                              | kg   | 2500         |
| Load centre distance                        | c                              | mm   | 600          |
| Service weight                              |                                | kg   | 821          |
| Lift height                                 | h <sub>3</sub>                 | mm   | 120          |
| Overall length                              |                                | mm   | 2526         |
| Overall width                               | b <sub>1</sub> /b <sub>2</sub> | mm   | 804          |
| Length to face of forks                     | l <sub>2</sub>                 | mm   | 1375         |
| Fork dimensions                             | s/e/l                          | mm   | 55/190/1150  |
| Turning radius                              |                                | Wa   | 2172         |
| Operator type                               |                                |      | Order-picker |
| Load distance, centre of drive axle to fork |                                | mm   | 980          |
| Wheelbase                                   |                                | mm   | 2117         |
| Axle loading, laden front/rear              |                                | kg   | 1050/2271    |
| Axle loading, unladen front/rear            |                                | kg   | 600/221      |

# Features

## High-speed performance and dual-pallet handling

With a top travel speed of 14.5 km/h, the TPL251 significantly increases throughput for long-distance order picking. The optional 2400 mm forks enable the handling of two pallets simultaneously, optimizing load cycles and minimizing travel time between aisles.



## Advanced Li-ion power system

Powered by a 24V/280Ah Li-ion battery, the TPL251 ensures long-lasting performance with zero maintenance and opportunity charging via an external plug. Optional 410Ah capacity provides even longer runtime, making it ideal for multi-shift operations without downtime.

## Ergonomic and comfortable operator station

Designed for operator well-being, the suspended platform and low-step entrance minimize vibration and fatigue. The foam backrest and wide standing space provide comfort during long shifts, while optional storage brackets accommodate accessories like scanners or WMS terminals.



## Precision handling and easy operation

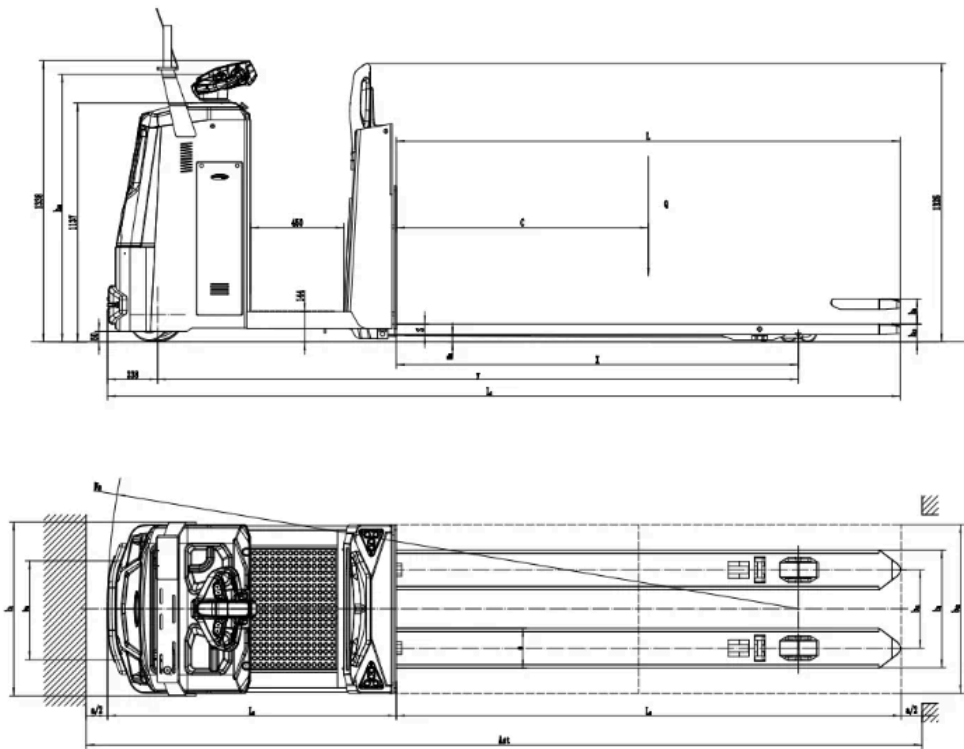
Equipped with electric power steering and automatic center positioning, the TPL251 ensures effortless control. Walk-along side buttons allow operators to move the truck alongside them during picking, improving workflow and reducing unnecessary steps between stops.

# VDI Chart

|        | SPECIFICATION                                       | REF                            | UNIT | VALUE           |
|--------|---|--------------------------------|------|-----------------|
| 1.4    | Operator type                                       |                                |      | Order-picker    |
| 1.5    | Load capacity                                       | Q                              | kg   | 2500            |
| 1.6    | Load centre distance                                | c                              | mm   | 600             |
| 1.8    | Load distance, centre of drive axle to fork         |                                | mm   | 980             |
| 1.9    | Wheelbase   |                                | mm   | 2117            |
| 2.1    | Service weight                                      |                                | kg   | 821             |
| 2.2    | Axle loading, laden front/rear                      |                                | kg   | 1050/2271       |
| 2.3    | Axle loading, unladen front/rear                    |                                | kg   | 600/221         |
| 3.1    | Tyre type   |                                |      | Polyurethane    |
| 3.2    | Tyre size, front                                    |                                | mm   | Φ260x105        |
| 3.3    | Tyre size, rear                                     |                                | mm   | Φ85x70          |
| 3.4    | Additional wheels (castor wheels)                   |                                | mm   | Φ180x65         |
| 3.5    | Wheels, number front/rear (x=drive wheels)          |                                |      | 1x+1/4          |
| 3.6.1  | Tread width, front                                  | b <sub>10</sub>                | mm   | 465             |
| 3.7.1  | Tread width, rear                                   | b <sub>11</sub>                | mm   | 370/515         |
| 4.15   | Lowered height                                      |                                |      | 85              |
| 4.16   | Length of loading surface                           |                                |      | 1375            |
| 4.19   | Overall length                                      |                                | mm   | 2526            |
| 4.2.1  | Overall height                                      |                                |      | 1273            |
| 4.20   | Length to face of forks                             | l <sub>2</sub>                 | mm   | 1375            |
| 4.21   | Overall width                                       | b <sub>1</sub> /b <sub>2</sub> | mm   | 804             |
| 4.22   | Fork dimensions                                     | s/e/l                          | mm   | 55/190/1150     |
| 4.24   | Fork carriage width                                 |                                | mm   | 55              |
| 4.3    | Free lift   |                                | mm   | 0               |
| 4.32   | Ground clearance, centre of wheelbase               |                                | mm   | 30              |
| 4.34.1 | Aisle width for pallets 1000×1200 crossways         |                                | Ast  | 3006            |
| 4.34.2 | Aisle width for pallets 800×1200 lengthways         |                                | Ast  | 2941            |
| 4.35   | Turning radius                                      |                                | Wa   | 2172            |
| 4.4    | Lift height   | h <sub>3</sub>                 | mm   | 120             |
| 4.9    | Height of tiller handle in drive position min./max. |                                |      | 1273            |
| 5.1    | Travel speed, laden/unladen                         |                                | km/h | 9.5/14.5        |
| 5.10   | Service brake                                       |                                |      | Electromagnetic |

| SPECIFICATION |  | REF | UNIT  | VALUE               |
|---------------|--|-----|-------|---------------------|
| 5.11          | Parking brake                                |     |       | Electromagnetic     |
| 5.2           | Lifting speed, laden/unladen                 |     | m/s   | 0.032/0.044         |
| 5.3           | Lowering speed, laden/unladen                |     | m/s   | 0.045/0.037         |
| 5.8           | Max. gradeability, laden/unladen             |     | %     | 5/16                |
| 6.1           | Drive motor rating S2 60 min                 |     | kW    | 3.3                 |
| 6.2           | Lift motor rating at S3 15%                  |     | kW    | 2.2                 |
| 6.4           | Battery nominal capacity                     |     | Ah    | 280                 |
| 6.4           | Battery voltage                              |     | V     | 24                  |
| 6.5           | Battery weight                               |     | kg    | 76                  |
| 6.6           | Energy consumption according to DIN EN 16796 |     | kWh/h | 0.494 <sup>1)</sup> |
| 6.7           | Turnover output according to VDI 2198        |     |       | 117.5               |
| 6.8           | Turnover efficiency according to VDI 2198    |     |       | 112.12              |
| 8.1           | Type of drive control                        |     |       | AC                  |
| 10.5          | Steering design                              |     |       | Electronic          |
| 10.7          | Sound pressure level at the drivers ear      |     | dB(A) | 74                  |
| 15.1          | Charger output current                       |     | A     | 3.3                 |

## VDI Drawing



# Options

| ITEM                            | OPTIONS (optional items marked in yellow)                |
|---------------------------------|--|
| Fork lowered height             | 85   |
| Load wheel type                 | Double   |
| Load wheel material             | PU   |
| Drive wheel material            | PU   |
| Battery capacity                | 280Ah (Li-ion truck)   410Ah (Li-ion)                    |
| Charger                         | 24V-100A external charger   24V-50A external charger     |
| Battery display indicator (BDI) | With hourmeter (Bluetooth)                               |
| USB interface                   | USB interface  |
| Front lamp                      | Front lamp   |
| Fork length                     | 1150   850/1000/1220/1300/1450/1600/1800 /2000/2200/2400 |
| Fork width                      | 560/685  |