LEO LOCATIVE
Automated Container Handling

Move containers easily!

www.leo-locative.com
MOVING LOADS CAN BE THIS EASY
THE NO-COMPROMISE TRANSPORT SOLUTION

SIMPLY BRILLIANT
+ LEO Locative is a driverless, battery-operated vehicle which has been designed for transporting bins and cartons with a size of up to 600 × 400 mm (L × W) and a weight of 20 kg max.
+ It can be used to link workstations and carry out internal transport tasks in a factory or warehouse.

LEO Locative does not require a computer or LAN to operate. It can be set up where and when required.

EASY TO USE
+ LEO Locative follows an optical track and can distinguish track colours.
  + ... It reads navigation commands programmed into floor markers.
  + ... It picks up loads at one transfer station and deposits it at the next station.

CONVINCINGLY VERSATILE
+ LEO Locative is ready to go with almost no user intervention thanks to its plug & play design
+ ... It is very versatile - application programming and navigation can be adapted rapidly and without the involvement of a third party.
+ ... It adapts easily to an enlarged radius of activity with additional pick-up and drop-off stations.
HOW DOES LEO LOCATIVE WORK?

IMMEDIATELY OPERATIONAL – LONG BATTERY LIFE

Determine your LEO route – our drawing shows an example of how an in-house route could look like. Now mark the LEO route with lane marking tape and place floor markers to determine stops, pick-up points and drop-off points.

Pick-up station
LEO picks up loads.

Loading surface
Ideally suited for bins sized 600 × 400 mm and 400 × 300 mm.
Drop-off station
LEO hands over bins, containers or cartons.

Twin station
LEO hands over load carriers and picks up other load carriers.

Workstation 1

Workstation 2

Production

Demonstration video
Watch our video for more info on LEO Locative:
www.leo-locative.com/vid-system
LEO KIT 1 STARTER

Have your bins conveniently moved from one workstation to the next by LEO! Bins are manually placed on or removed from LEO’s loading surface. Pick-up & drop-off stations can be installed as and when required.

LEO KIT 1 INCLUDES

+ 1 LEO Locative vehicle including battery
+ 1 LEO Locative Accessories set complete with:
  • 1 charger
  • Track set # 1:
    130m of red, green and blue Flex floor marking tape
  • 25m of blue Robust floor making tape
  • 65 instruction code markers suitable for use without transfer station
  • 1 software update cable
  • 1 converter package for international use
  • A template to help lay the floor tape

Orders can be placed online at www.leo-locative.com/starter-1
LEO KIT 2 PICK-UP & DROP-OFF STATIONS

Have your bins conveniently moved from one station to the next by LEO! Bins are automatically placed on or removed from LEO’s loading surface. Supplied with 2 stations.

LEO KIT 2 INCLUDES

- 1 LEO Locative vehicle including battery
- 1 drop-off station
- 1 pick-up station
- 1 LEO Locative Accessories set complete with:
  - 1 charger
  - Track set # 2: 260m of red, green and blue Flex floor marking tape
  - 25m of blue Robust floor marking tape
  - 112 instruction code markers suitable for use without transfer station
  - 1 software update cable
  - 1 converter package for international use
  - A template to help lay the floor tape

Orders can be placed online at www.leo-locative.com/starter-2
LEO KIT 3 TWIN STATIONS

Create a circular route! Empty bins are returned.
Supplied with 2 twin stations.

LEO KIT 3 INCLUDES

+ 1 LEO Locative vehicle including battery
+ 2 twin stations
+ 1 LEO Locative Accessories set complete with:
  - 1 charger
  - Track set # 2:
    260m of red, green and blue Flex floor marking tape
  - 25m of blue Robust floor making tape
  - 112 instruction code markers suitable for use without transfer station
  - 1 software update cable
  - 1 converter package for international use
  - A template to help lay the floor tape

Orders can be placed online at www.leo-locative.com/starter-3
LAY OUT TRACK, POSITION THE INSTRUCTION MARKERS AND YOU'RE READY TO GO!
# FACT SHEET

## LEO TRANSPORTER

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (W × L × H)</td>
<td>500 × 830 × 921 mm</td>
</tr>
<tr>
<td>Weight including charger</td>
<td>42 kg</td>
</tr>
<tr>
<td>Maximum speed</td>
<td>0.7 m/s</td>
</tr>
<tr>
<td>Nominal speed</td>
<td>0.4 m/s</td>
</tr>
<tr>
<td>Tension</td>
<td>24 V</td>
</tr>
<tr>
<td>DC power</td>
<td>40 V</td>
</tr>
<tr>
<td>IP Code</td>
<td>21IP</td>
</tr>
<tr>
<td>Sound volume</td>
<td>&lt; 60 db</td>
</tr>
</tbody>
</table>

## LEO CHARGER

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (W × L × H)</td>
<td>120 × 190 × 70 mm</td>
</tr>
<tr>
<td>Primary voltage</td>
<td>230 V / AC 50 Hz</td>
</tr>
<tr>
<td>Electric charge</td>
<td>4 A</td>
</tr>
<tr>
<td>Protection class</td>
<td>III</td>
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</table>

## LEO BATTERY

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (W × L × H)</td>
<td>370 × 80 × 225 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>14 kg</td>
</tr>
<tr>
<td>Capacity</td>
<td>20 Ah</td>
</tr>
<tr>
<td>Service hours (battery fully charged)</td>
<td>8 – 12 h</td>
</tr>
<tr>
<td>Charging time</td>
<td>6 – 8 h</td>
</tr>
</tbody>
</table>

## LOADS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum dimensions (W × L × H)</td>
<td>600 × 400 × 400 mm</td>
</tr>
<tr>
<td>Minimum dimensions (W × L × H)</td>
<td>250 × 150 × 50 mm</td>
</tr>
<tr>
<td>Maximum weight capacity</td>
<td>20 kg</td>
</tr>
<tr>
<td>Plastic load carriers</td>
<td>yes</td>
</tr>
<tr>
<td>Carton load carriers</td>
<td>good quality cartons</td>
</tr>
</tbody>
</table>
ROUTE PLANNING DATA

Track width (straight track) 550 mm
Minimum width of travel way 1000 – 1100 mm
Curve radius of track 700 mm
Envelope (outer / inner radius) 1150 / 400 mm

SYSTEM CAPACITY

Max. number of LEO vehicles 0.2 vehicles/track metre
Max. throughput 350 load carriers/h

TRANSFER STATIONS

Dimensions of a single station (W × L × H) 710 × 740 × 850 mm
Dimensions of a twin station (W × L × H) 710 × 1540 × 850 mm
Weight of a single station 60 kg
Weight of a twin station 120 kg
Tension 24 V
Performance 5 W

STATION ACCESSORIES

Order picking table (W × L × H) 750 × 400 × 620 mm lower edge
Drop-off buffer lane, 1200 mm long (W × L × H) 650 × 1200 × 920 mm
Pick-up buffer lane, 1200 mm long (W × L × H) 650 × 1200 × 780 mm
Drop-off buffer lane, 2400 mm long (W × L × H) 650 × 2400 × 1000 mm
Pick-up buffer lane, 2400 mm long (W × L × H) 650 × 2400 × 710 mm

OPERATING REQUIREMENTS

Floor flatness (gradient) 2 %
Floor colour no requirement
Temperature +5° to +45° C
Maximum air moisture not condensing
LEO LOCATIVE – THE BIN TRANSPORTER FROM BITO. DRIVERLESS AND READY TO USE.

BITO Storage Systems
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Hemdale Business Park
Nuneaton
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www.bito.com