

Evy-Box



Evy-Box's mission is to deliver boxes weighing up to 175 kg between several storage areas and/or production lines. The mobile robot is autonomous and equipped with a lifting and lowering system. It will automatically load/unload onto passive fork racks.

175 kg

Payload

120 km

Average km completed per month

1.20 m/s

Max speed



Lifting platform

Its lifting platform, equipped with a crate centering device, allows it to dock autonomously with passive fork racks.

High transport capacity

Evy-Box can carry loads of 175 kg by storing up to two 600 x 400 mm Eurostandard boxes next to each other.

Safe

Designed according to a risk analysis following the Machinery Directive 2006/42/EC and the standard ISO 3691-4.

Options



Visual Warning presence system



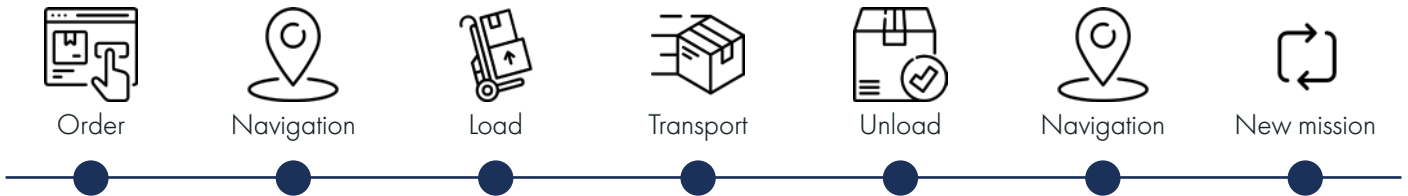
RFID Reader



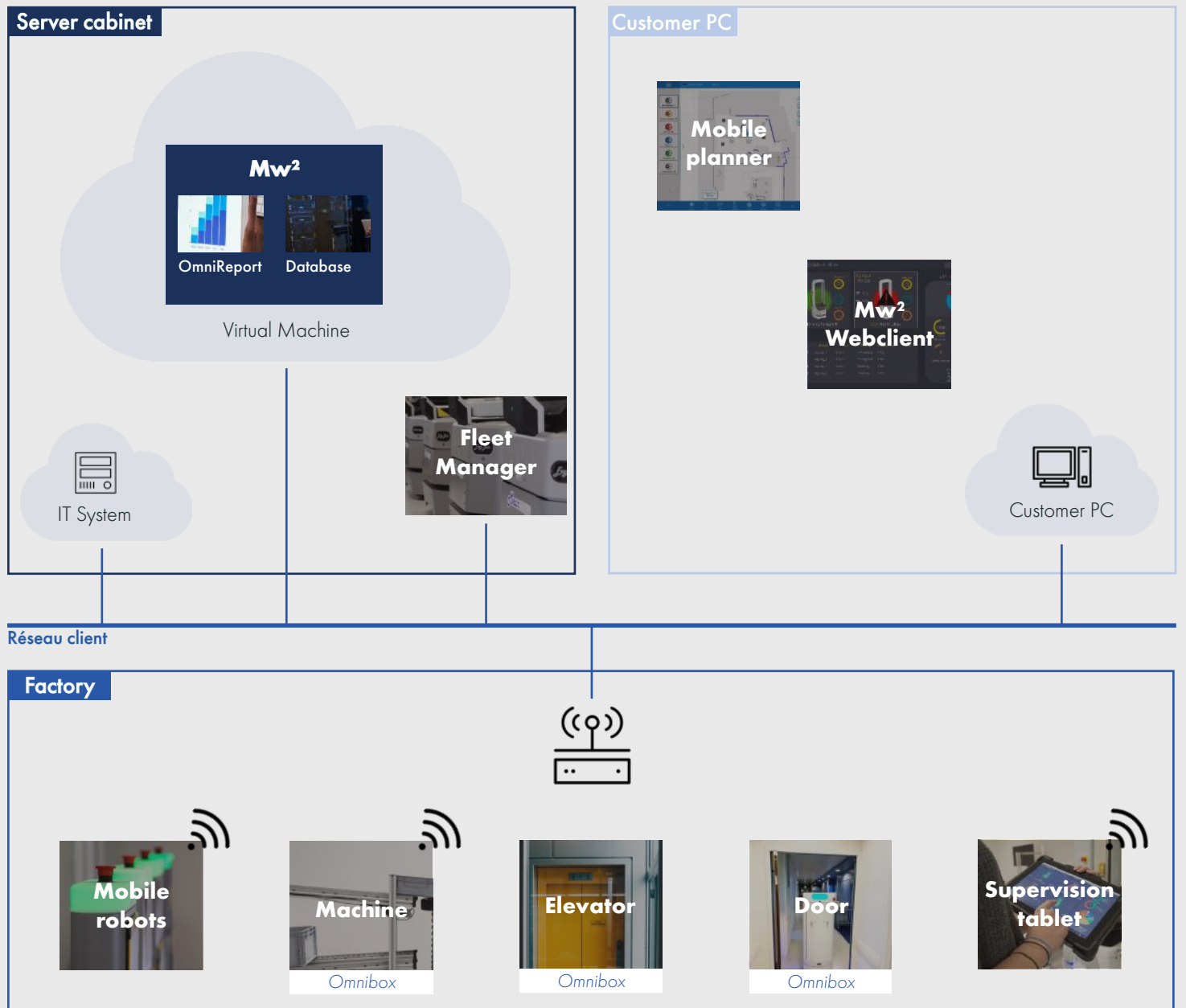
Acuity Localization

A turnkey solution

Automatic Delivery



Solution ecosystem



Technical specifications



General

Max. speed

1.20m/s (4,32km/h)

Dimension (LxWxh)

1000 x 718 x 1500 mm (1000mm diameter)

Mechanical weight

223 kg



Application

Technology

Lifting platform

Automatic boxes centring device

Max. transfer height

900 mm

Min. transfer height

700 mm

Up and down system speed

1,5m/minute

Payload

175 kg

Size of the embedded containing

800x600mm, 2(600x400)



Mobility

Navigation

Autonomous routing by localizing with safety scanning laser based on environment mapping.

Environmental map making method

Scan by walking the mobile robot through the environment.

Move

Avoidance and bypassing of obstacles by calculating a new trajectory.



Human-Machine interface

Touchscreen

7" TFT LCD screen, 800x480 pixels

Manual Mode

Two push buttons to move the robot manually if necessary



Environnement

Operating temperature range

5 - 40° C

IP Class

IP20

Application environment

Indoor use only, limited dust and oil suspension

Climb grade

Flat floor only

Floor requirement

Linoleum, epoxy or concrete (no water, no oil, no dust)



Technical specifications



Safety

Safety laser scanner

Located at the front, Class 1
PLd Safety by ISO-13849
Max. range : 40m
Field of view: 240°.

Low front laser

Front located, Class 1
Max. range : 4m
Field of view: 126°.

Side lasers

On both sides of the mobile robot, Class 1
Max. range : 4m
Field of view: 270°.

Emergency Stop

2 on each side of the robot

Rear Sonar

Time-of-flight (TOF) sensors

Front bumper

At front of platform, 2 pairs of sensors

Warning lights

Light discs on each side
Upper LED strips

Speaker and buzzer

3.5", 80W max



Battery

Run time

± 10 hours

Recharge time

± 4 hours

Voltage

22-30 VDC LiFePO4

Capacity

72 Ah nominal capacity

Battery life time

2 000 recharge cycles

Charging method

Automatic, manual



Communication

WI-FI

IEEE 802.11 a/b/g

Bluetooth

Bluetooth 2.+ERD



Declaration

EC Declaration of conformity

CE Marking

MeanWHOLE