# SMART PARCEL LOCKERS





### Parcel Lockers

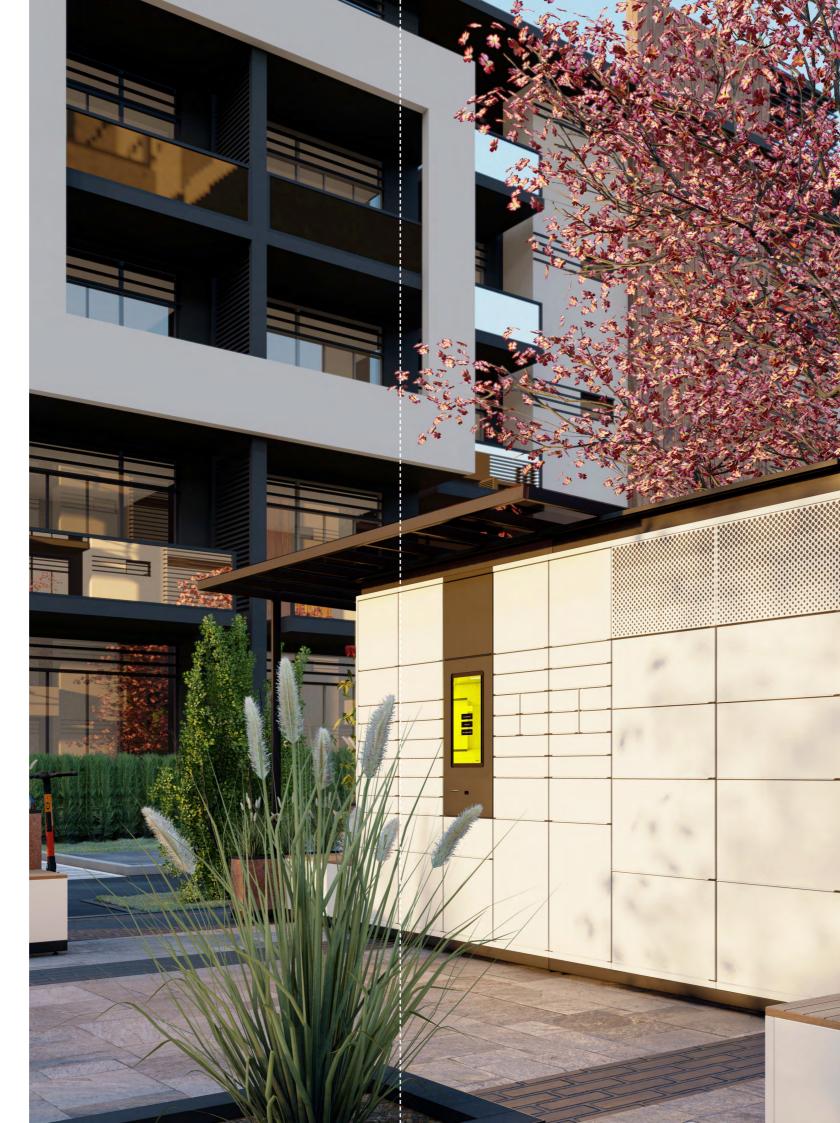
In search of improving the supply chain, we have developed a solutions system that makes delivery more personalized, convenient and faster.

LOKO family is a 24/7 self-service post office that consists of three product types, which are designed for a certain business model and covers specific needs of the end customer.

This new generation of parcel terminals by Modern Expo is the optimal solution for the organization of the last-mile delivery.

Integration of digital technologies, high quality storage (with the ability to control the temperature regime) and convenience of use simplify last-mile logistics.

Different cell configurations and a wide set of accessories meet the needs of both logistics companies and retailers.



- CO<sub>2</sub> emissions reduction by more than 50%
- > 24 / 7 / 365 lockers chain
   close to every client
- > Effective work of couriers
- Social distancing
- > Ready to use solution

- Customizable number of columns
- > Cell variability
- Illumination of each column
- > CCTV
- Alarm for unauthorized opening
- > Software
- > Api optimization
- > Air quality sensor
- > Intelligent design
- Integration of Fresh column in one line with dry columns
- > Autonomous locker

## Loko Family

Loko family consists of 5 different types of parcel lockers with a big range of accessories to create your ecosystem, integrated into urban infrastructure.

- Outdoor and indoor usage
- Screen or BLE operation
- Loko Fresh in the same line with Loko Logis
- Easy scalability of the parcel locker
- Customizing of the columns
- Open API
- Inclusiveness
- Energy efficiency
- Wide range of accessories
- Autonomous work

Covers all segments of the market (postal operators, couriers, e-commerce, retailers).

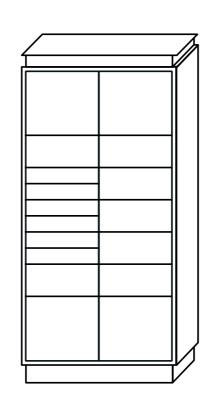
Adaptation of software depending on client's needs.

# Logis

This new generation of parcel lockers by Modern Expo is the optimal solution for the organization of the last-mile delivery.

Integration of digital technologies, high-quality storage (with the ability to control the temperature regime) and the convenience of use, simplify the last mile logistics.

Different cell configurations and wide set of accessories meet the needs of both logistics companies and retailers.



### Local

This elegant device will become an indispensable functional element of private houses, residential areas and country houses, bringing delivery service at the last mile to a fundamentally new level.

# Fresh

«FRESH» module is unique development of Modern Expo and an excellent instrument for improving brands' omnichannel communication with their clients.

This method of contactless delivery is the best solution not only for logistics operators but also for restaurants, cafés, local producers, and grocery stores.

#### **TEMPERATURE MODES**

M1(-1...+5°C) cooling M2(-1...+7°C)

freezing

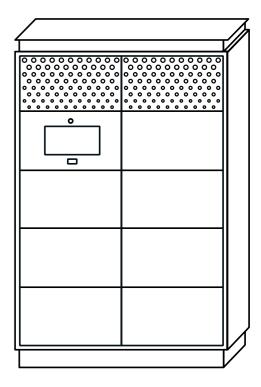
L1(-15...-18°C) L2(-12...-18°C)

### Eco Logis

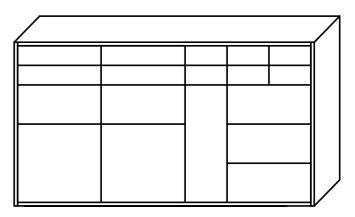
Taking into consideration that logistics and delivery services directly affect energy consumption, our innovations reduce negative impacts on the environment.

We've developed solutions that work autonomously, using battery for power. Eco Logis parcel lockers are based on BLE technology, which ensures the possibility to reduce energy intake significantly and eliminate high energy-consuming components.









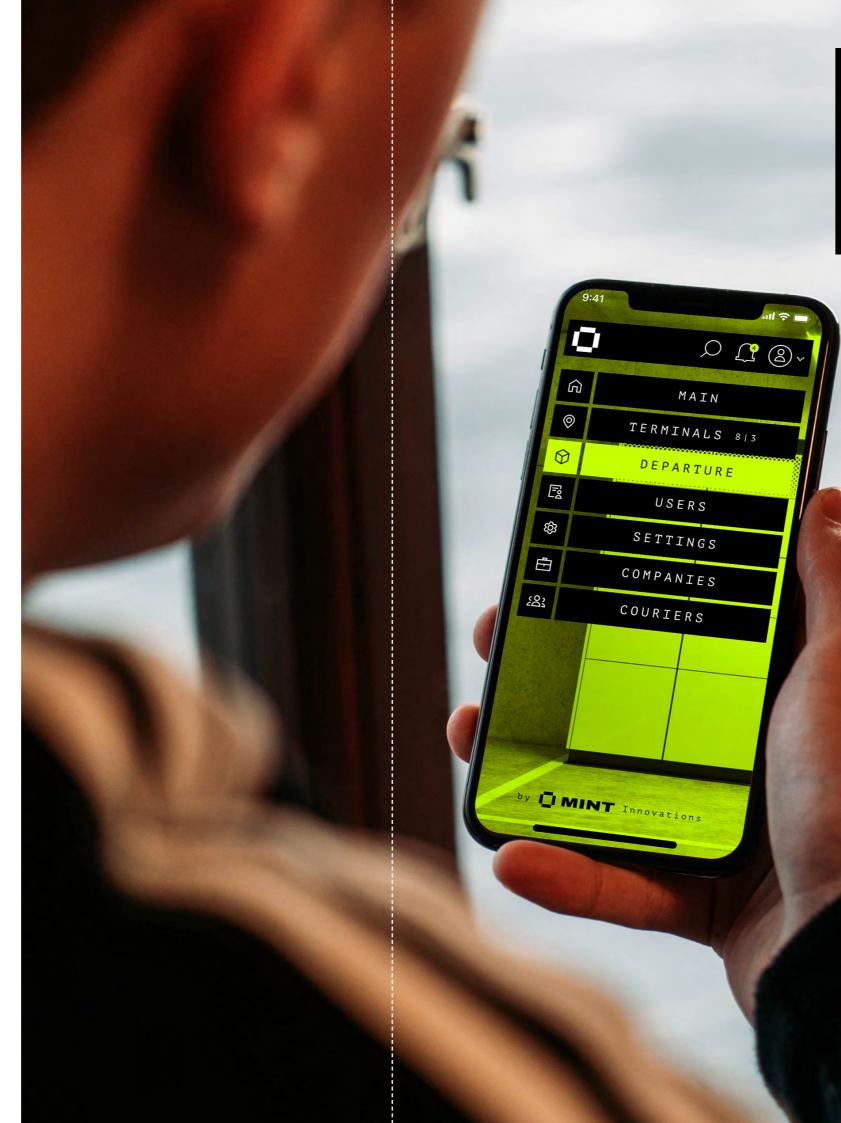
Loko Common is developed specifically for installation in the entrance halls of residential and office buildings. Installing this device in proximity to the end customer is the way to provide convenience, seamless experience and perfect service.

# Software

Software for parcel lockers allows managing the entire lockers network in real-time. Namely, tracking the status of each parcel, monitoring the number of busy and free cells, and receiving all information about the machine.

Moreover, we create applications for couriers and final customers, that ensures maximum parcels delivery speed and provide a seamless customer experience while using parcel locker.

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- Development and integration
- Adaptive to other platforms
- > Real-time tracking

- Careful tracking of each parcel locker
- > Service network 24/7
- > Unique Al-based security system

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 Video control of each point

### Network

We provide our customers with integrated solutions for effortless parcel lockers network creation.

We develop software for managing the entire parcel lockers network in realtime and are experienced in adapting the machines to our client's software.

# Energy Efficiency

We are constantly working to reduce the carbon footprint and develop our products less energy-consuming. Our solutions are technological and reliable, so you will not spend extra time and energy to maintain their viability.

We already offer products that work without a network connection, but using natural renewable resources.



- We use only industrial hardware components. Our products are tested in a certified laboratory to guarantee the compatibility of components and product performance in different climate conditions (-25°C - +40°C)
- The complex solution is tested in harsh weather conditions to confirm the IP-protection
- All main components are installed in separate blocks, helping a technician to detect a problem very quickly
- Usage of the automotive approach allows to remove each separate broken block and change it with the new one, saving time and cost for service and maintenance
- Plug&play solution guarantees the quick installation of the product



### **BrainBox**

How it works?

When it comes to service and maintenance there can be a lot of issues which are very complicated to detect on the location. It takes a lot of time for technician. That's why we are one step forward how to solve this issue very fast.

When on the location parcel locker is not working, it's very easy to replace the whole smartbox with the new one (technicians have them in stock). You just unplug the cables then you connect the new smartbox and start the APM — so business is working.

After that, the technician can work with the damaged smartbox anywhere he wants, avoiding bad weather conditions. Because very frequently it's complicated to work with IT-components during rain.

After detecting the problem, technician replaces damaged component and this smartbox is ready to use.

# **Pick up**

How does delivery to the Modern Expo parcel terminals work, and why is it convenient?

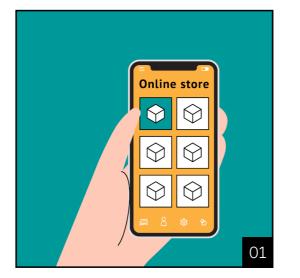
Let's imagine the situation: the end customer orders something online and chooses the nearest parcel terminal as the delivery point.

Then, the parcel is transported by the logistics operator and issued to the courier along with the QR code, which he uses for the delivery directly to the parcel terminal.

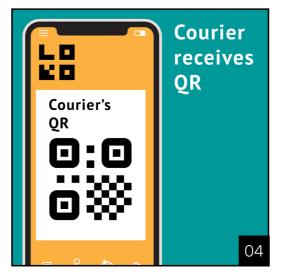
Immediately after this, the end customer receives a notification with a QR code or a a password that informs that the order has arrived at the destination.

So, that's it! It remains only to pick up the parcel by scanning the QR code or entering the password on the touchscreen.

Using our parcel locker is simple, understandable to everyone, and highly secured. Customers can pick up parcels any time of the day, without queues and unnecessary hassles, and with no need to adjust to the schedule of logistic operators or courier services.



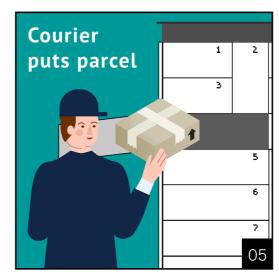
Order online



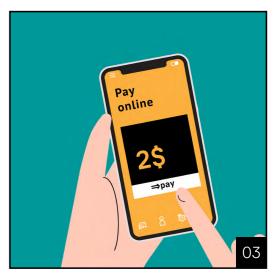
Courier receives unique QR-code for your parcel and address of the locker



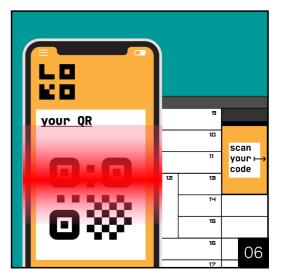
Choose delivery to parcel locker



Courier puts your parcel into the cell



Pay online



The final customer receives unique QR code scans it, and takes the parcel from the locker

### Click & Collect complex solution by Modern Expo

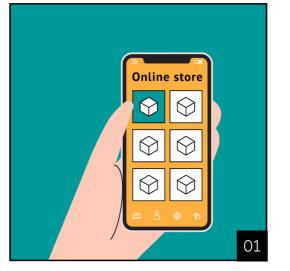
What is Click & Collect in retail?

Click & collect simply means buy online, pick up in-store or near store. It's become a popular retail strategy that allows customers to have the best of both worlds: online shopping and fast pick up.

That way, customers don't have to pay for shipping, wait a long time for their items to be delivered, and deal with delivery errors that often arise with order fulfillment. They can shop from the comfort of their own homes, purchase the item online, and go to the store when it is time to see the item is ready for pickup.

Click & Collect complex solution by Modern Expo includes:

- Elastic online-store
- Pickers' app
- Loko LOGIS or Loko FRESH
- Control dashboard



Order online



The final customer receives a unique QR code scans it



Choose delivery to parcel locker



Pick up your parcel 24/7



Pay online

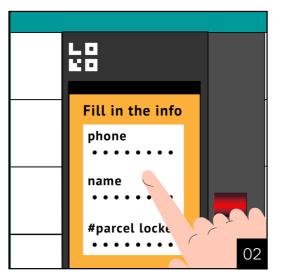
# How it works for retailer?

- Registration of new company on our online platform
- Authorizing in personal cabinet
- Setting up the company and the profile
- Adding products to the online platform
- Managing and monitoring statistics and workflows
- Gaining revenues

# **Drop off**



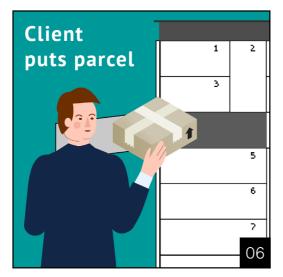
Log in near the parcel locker using monitor



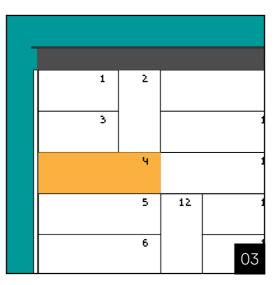
Filling in the information about recipient and number of locker where to deliver the parcel



Scan this printed QR code



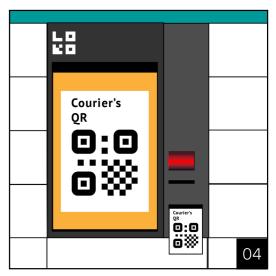
Client puts parcel into the cell



Choosing cell size in accordance to the size of the parcel



Courier receives unique QR code for your parcel and address of the locker



Unique QR-code generates automatically from the printer on the locker. Stick this label to your parcel



Courier picks up the parcel

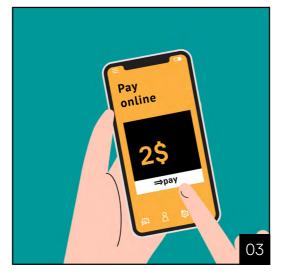
### Pick up in BLE Terminal



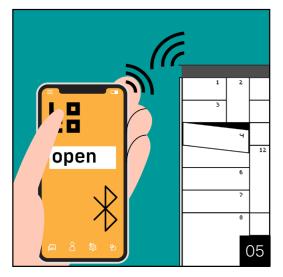
Order online



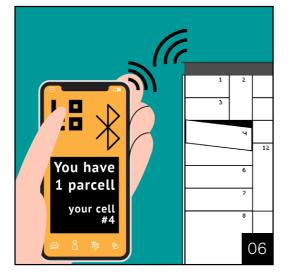
Choose delivery to parcel locker



Pay online



Courier connects via BLE technology on a smartphone and opens a cell using a courier application and puts a parcel into the cell



The final customer receives a notification that the parcel is already in the locker connects via BLEtechnology and opens a cell using the client's application



Courier receives notification in courier application



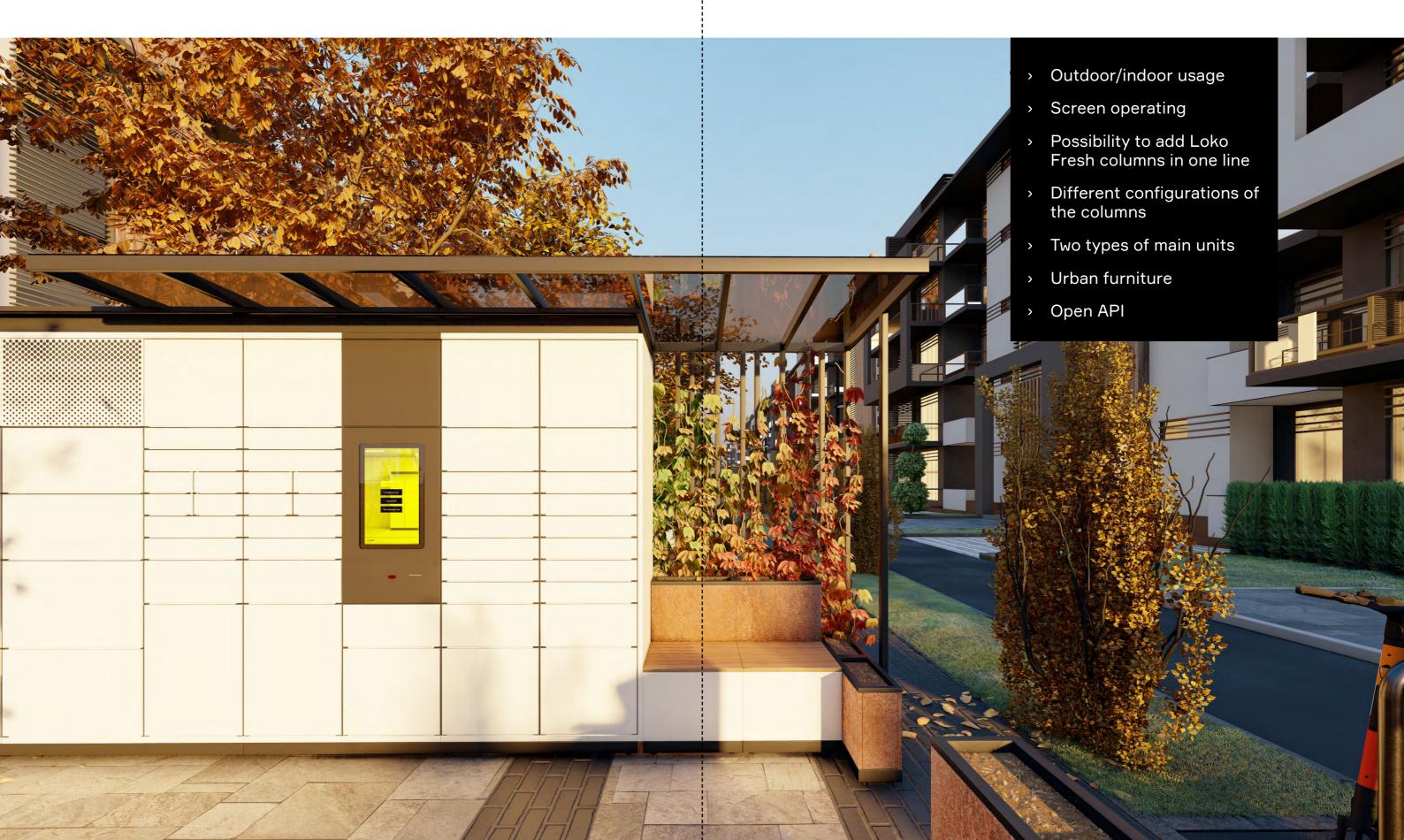












Different cell configurations and wide set of accessories meets the needs of both logistics companies and retailers.

### **Modules & Accessories**

#### **Basic modules:**

- Postal column
- Terminal module

#### Mandatory Accessories:

- Base
- Canopy
- Side panels

#### **Optional accessories:**

Roof with CCTV

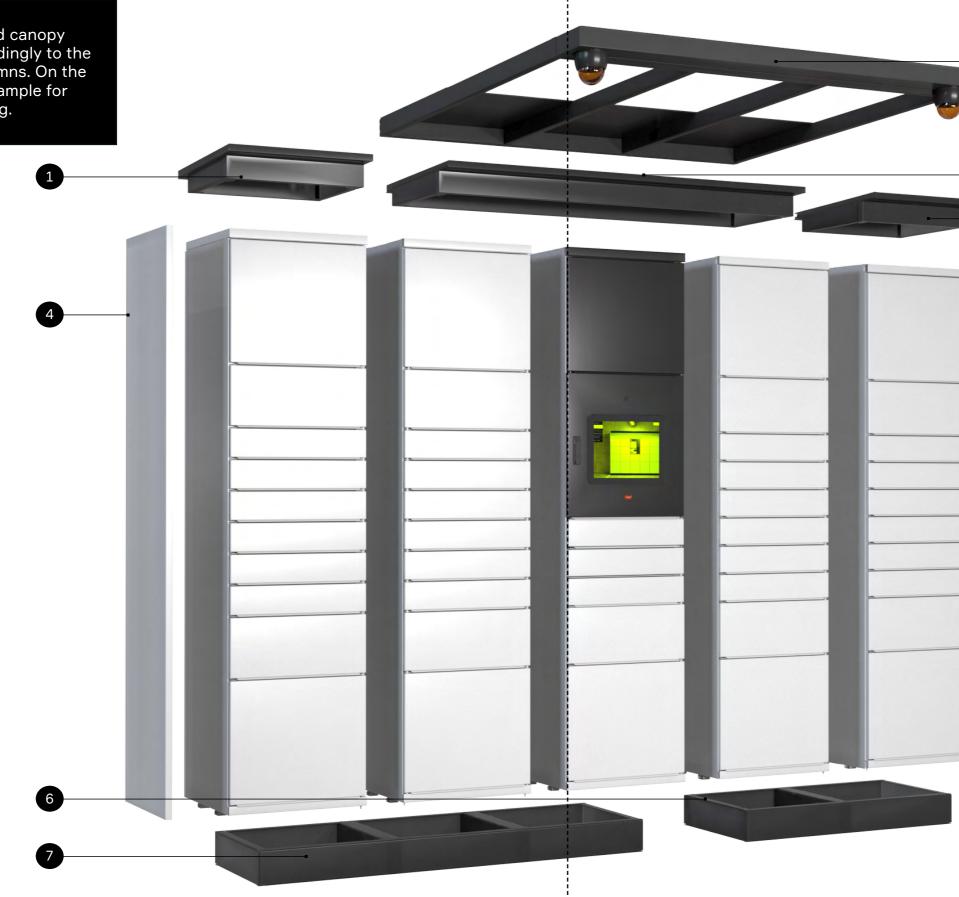


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- Side panels
- Standard postal column
- Terminal column
- 5 Base
- 6 Roof
- CCTV
- Face camera
- Monitor
- 10 QR-code scanner

### **Explosion View**

Quantity of base and canopy are supplying accordingly to the quantity of the columns. On the image it's just an example for better understanding.





- Canopy left

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- Canopy right
- Canopy and roof with CCTV
- Sidepanels left
- Sidepanels right 5
  - Base of two columns
  - Base of three columns

# Terminal standard specs



#### Industrial computer

RAM: 2\*DDR4 Slot,max 16GB Storage: mSATA + SATA 2 storages I/O: 2\*RJ45 Lan; VGA+HDMI;2\* USB3.0+2\*USB2.0; 5 x RS232 Com port, 1 x RS485 Com port

#### Monitor

21"Open Frame LCD Monitor with custom 4mmtouch glass pcap multi touchscreen,Vandal proof,VGA,DVI,HDMI input,1000nits high1920x1080 FHD resolution

**Scanner** Bar and QR-code reader

Face camera GS-15WDCM

Lock DC8V ~ DC24V, AISI-304

Controller MKBABB CL12-D 12-24V DC

NVR+HDD 4TB 5900rpm 64MB\_3.5 SATA III

Emergency opening sensor

\* Quantity for 1 parcel terminal: 1

One terminal module can operate up to 12 standard postal columns



#### Industrial computer

RAM: 2\*DDR4 Slot,max 16GB Storage: mSATA + SATA 2 storages I/O: 2\*RJ45 Lan; VGA+HDMI;2\* USB3.0+2\*USB2.0; 5 x RS232 Com port, 1 x RS485 Com port

#### Monitor

15.6"Open Frame LCD Monitor with custom 4mmtouch glass pcap multi touchscreen,Vandal proof,VGA,DVI,HDMI input,1000nits high1920x1080 FHD resolution

#### Scanner

Bar and QR-code reader

#### Face camera GS-15WDCM

Lock DC8V ~ DC24V, AISI-304

#### Controller MKBABB CL12-D 12-24V DC

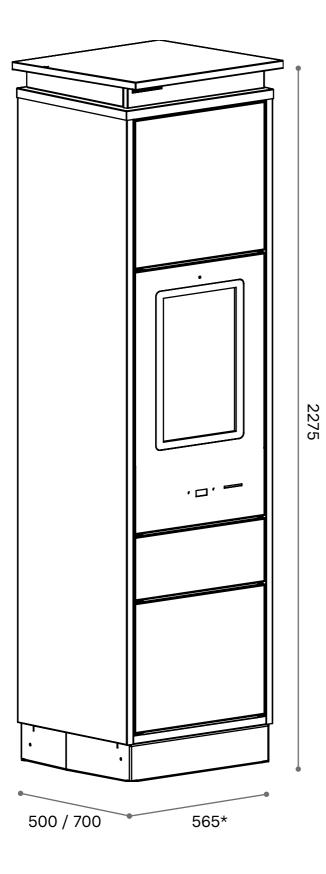
NVR+HDD 4TB 5900rpm 64MB\_3.5 SATA III

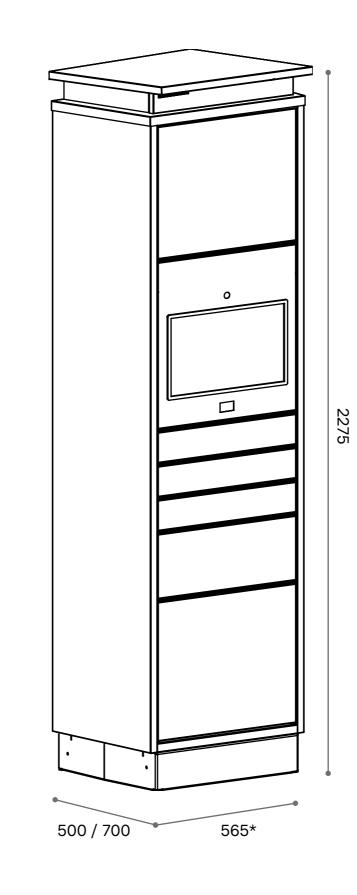
#### Emergency opening sensor

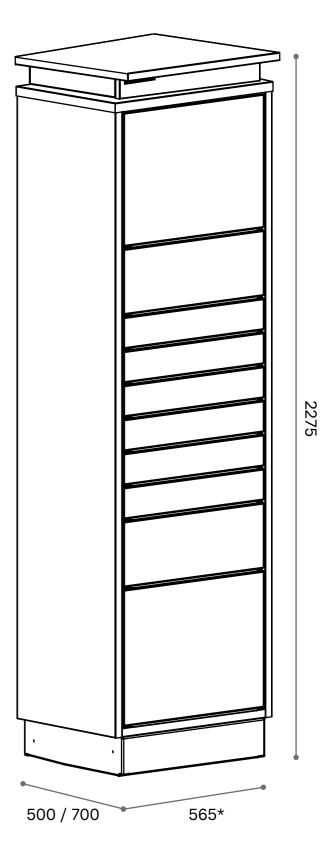
# Dimensions of the column

All dimensions are in millimeters

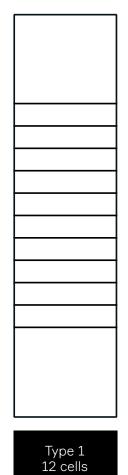
\* With side panels





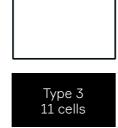


Standard configurations of LOKO columns

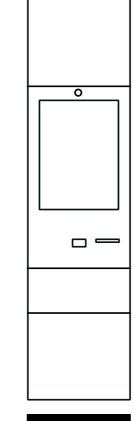


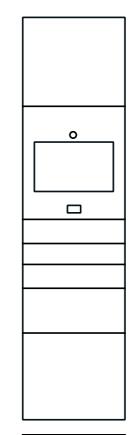
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Type 2 12 cells

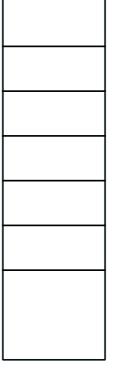








Terminal Pro



Type 5 7 cells

#### Terminal Standard

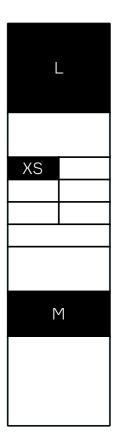
Type 6 4 cells

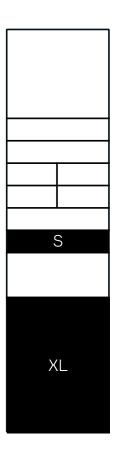
44

### Postal column

All configurations of postal columns have electronic locks and controllers in the specification.Configuration on the picture is given for example.

Type of the cell	Height	Width	Depth
XS	100 mm	185 mm	470/675 mm
S	100 mm	440 mm	470/675 mm
М	210 mm	440 mm	470/675 mm
L	430 mm	440 mm	470/675 mm
XL	650 mm	440 mm	470/675 mm

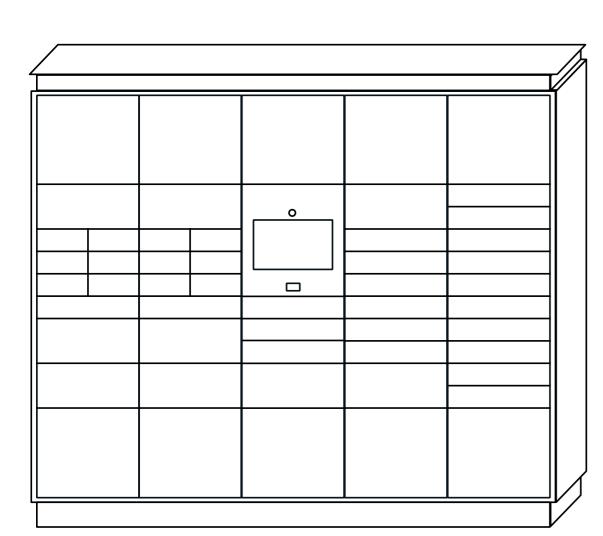


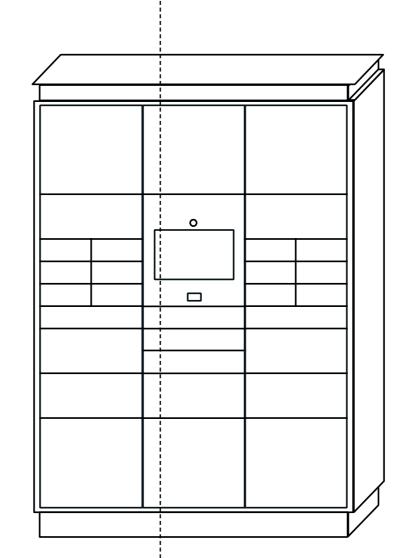


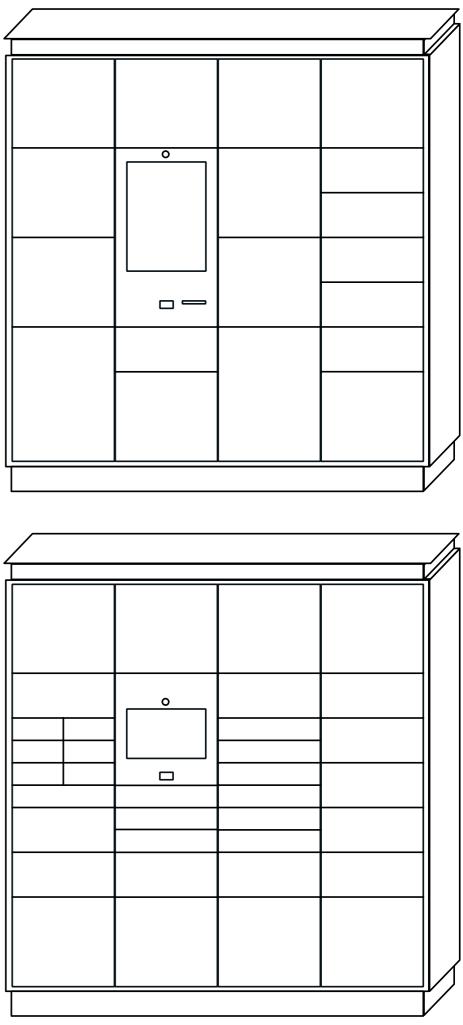
# Options of sets for Loko LOGIS

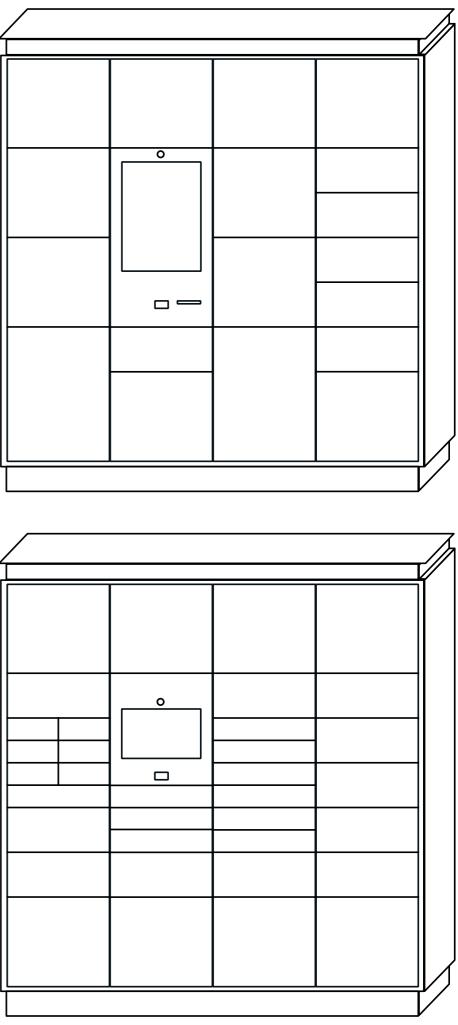
#### How to create sets:

The terminal column is mandatory — 1 piece for 1 locker, postal columns are ordered according to the clients' request.











LOKO FRESH with cooling and freezing columns. Perfect, ready to use solution for retailers.



### **Modules & Accessories**



M1(-1...+5 °C)

L2(-12...-18°C) Ambient conditions class

7 class (+35°C/70% R.H)

**Ecofriendly refrigerant** R290

Noise level <50 DB

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- Roof
- Side panels
- Standard postal column
- Face camera
- Monitor
- QR-code scanner
- Terminal column
- CCTV
- Base

10

# Terminal standard specs



#### Industrial computer

RAM: 2\*DDR4 Slot,max 16GB Storage: mSATA + SATA 2 storages I/O: 2\*RJ45 Lan; VGA+HDMI;2\* USB3.0+2\*USB2.0; 5 x RS232 Com port, 1 x RS485 Com port

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Lock DC8V ~ DC24V, AISI-304

Controller MKBABB CL12-D 12-24V DC

NVR+HDD 4TB 5900rpm 64MB\_3.5 SATA III

**Emergency opening sensor** 

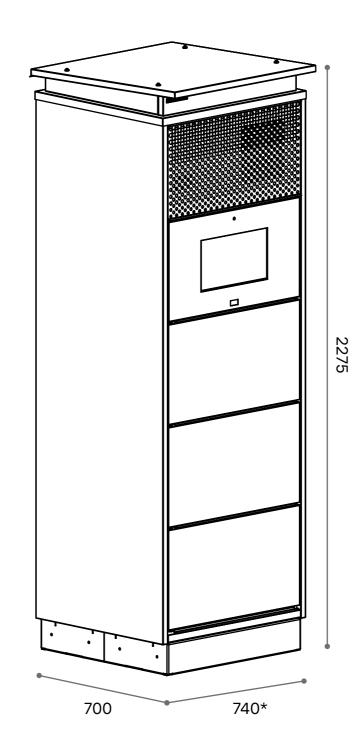
\* Quantity for 1 parcel terminal: 1

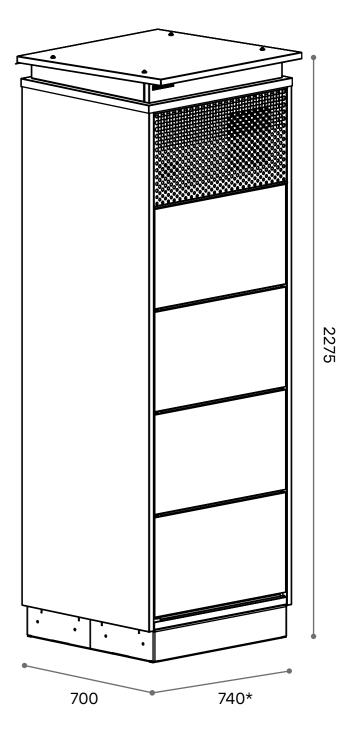
One terminal module can operate up to 12 standard postal columns

# Dimensions of the column

All dimensions are in millimeters

\* With side panels

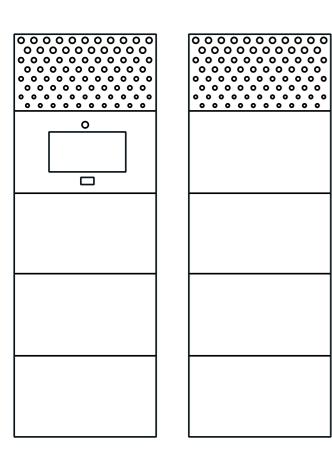




### Standard configurations of LOKO Fresh columns

#### **Existing modules:**

- Cooling column
- Freezing column
- Ambient column
- Terminal cooling column
- Terminal ambient column



Terminal Fresh Standard Type Fresh 4 cells

### Postal column

Type of the cell	Height	Width	Depth
М	330 mm	460 mm	500 mm

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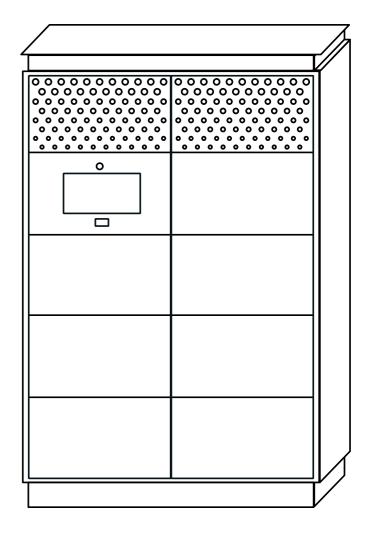
### Options of sets for Loko FRESH

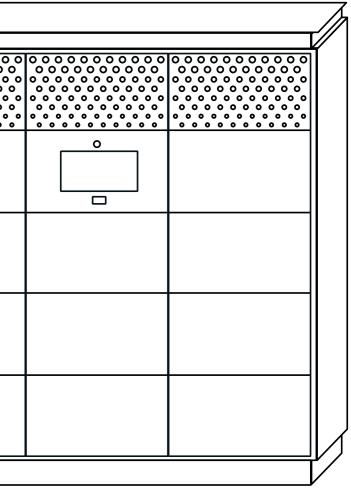
#### How to create sets:

The terminal column is mandatory (cooling or ambient) – 1 piece for 1 locker, other columns are ordered according to the clients' requests.

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### Options of sets for Loko LOGIS + Loko FRESH

#### How to create sets:

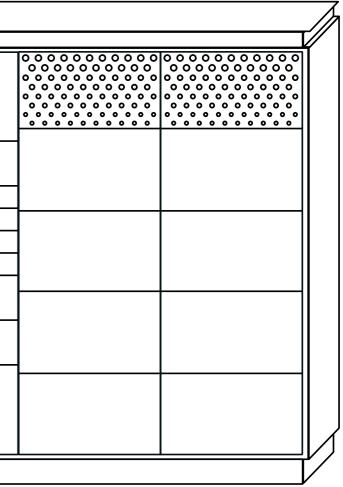
When there's a combination of Loko LOGIS and Loko FRESH everything is operated
 from LOGIS terminal column
 (standard or PRO), so it's necessary to order only cooling, freezing or ambient columns of Loko FRESH.

Power supply and decorative side panels are mandatory for ordering.

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# **ECO LOGIS**

ECO LOGIS – compact outdoor parcel locker. Screenless autonomous solution. This parcel locker provides more opportunities to install terminals where connection to the the network is not possible.

### BLE-technology

- > Lowering operating costs
- Fast installation an connection to the network
- Operating with Mobile Apps
- > Contactless
- Lifespan of battery –
  2 years

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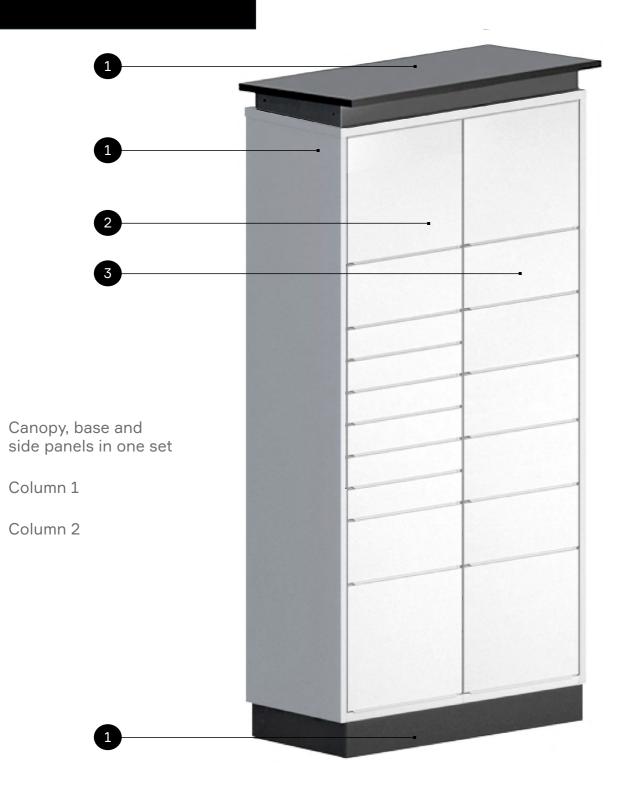


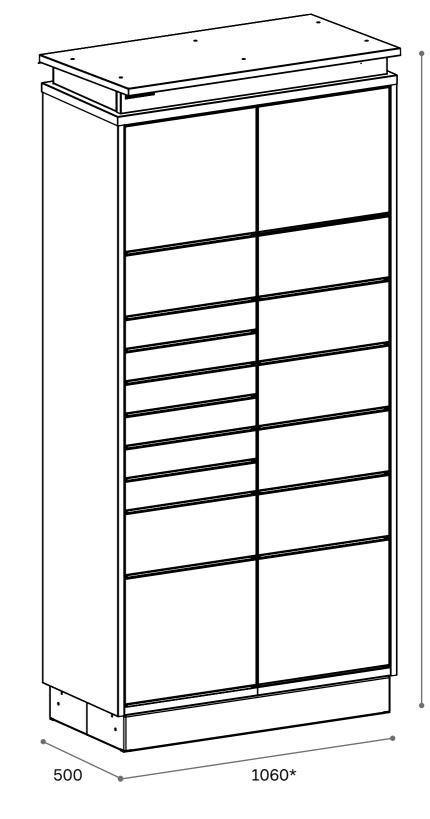
### Modules

Eco Logis parcel locker always consists of 2 columns (in the same cell configurations as Loko LOGIS). Dimensions

All dimensions are in millimeters

\* With side panels





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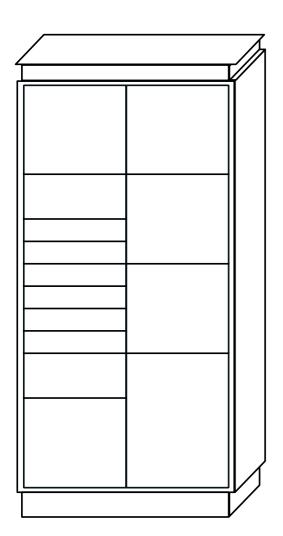
# Options of sets for Loko ECOLOGIS

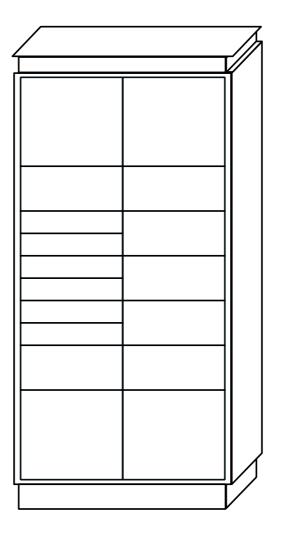
#### How to create sets:

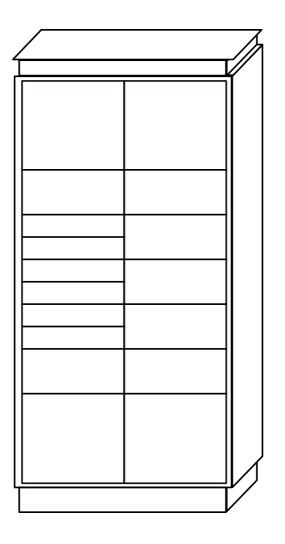
Eco LOGIS is a parcel locker with 2 columns.

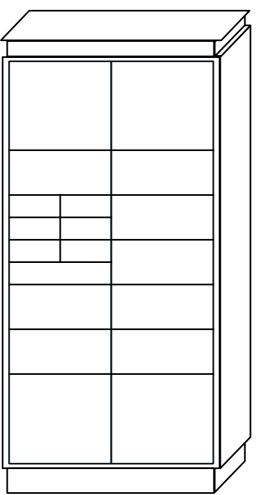
There's no terminal column with screen, because the workflow goes in application on courier's or client's smartphone.

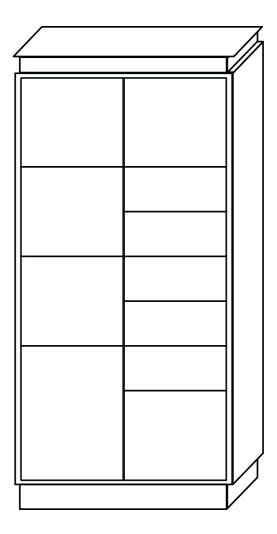
Cell configurations of the columns are the same to Loko LOGIS.

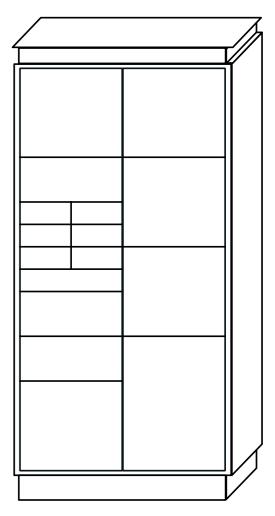












# COMMON

COMMON – compact indoor parcel locker. For apartment buildings, indoor version. Working on BLE-technology.



### Modules

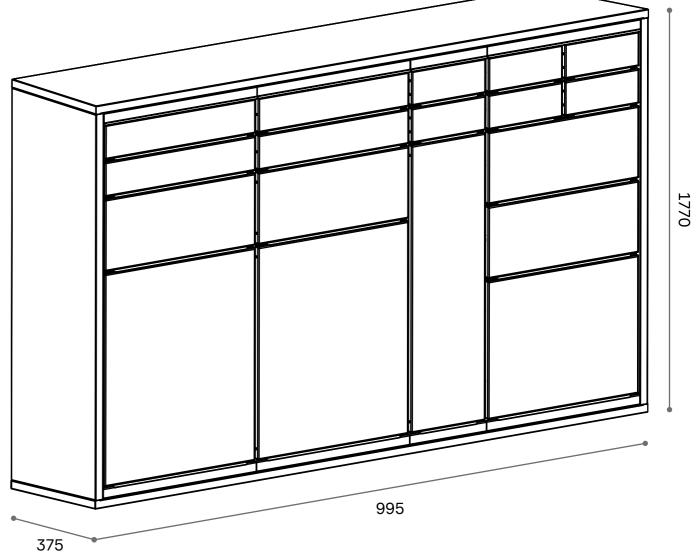
Loko COMMON exists only in one configuration for 18 cells

- Full set in one code
- Fixation to the floor
- Fixation to the wall

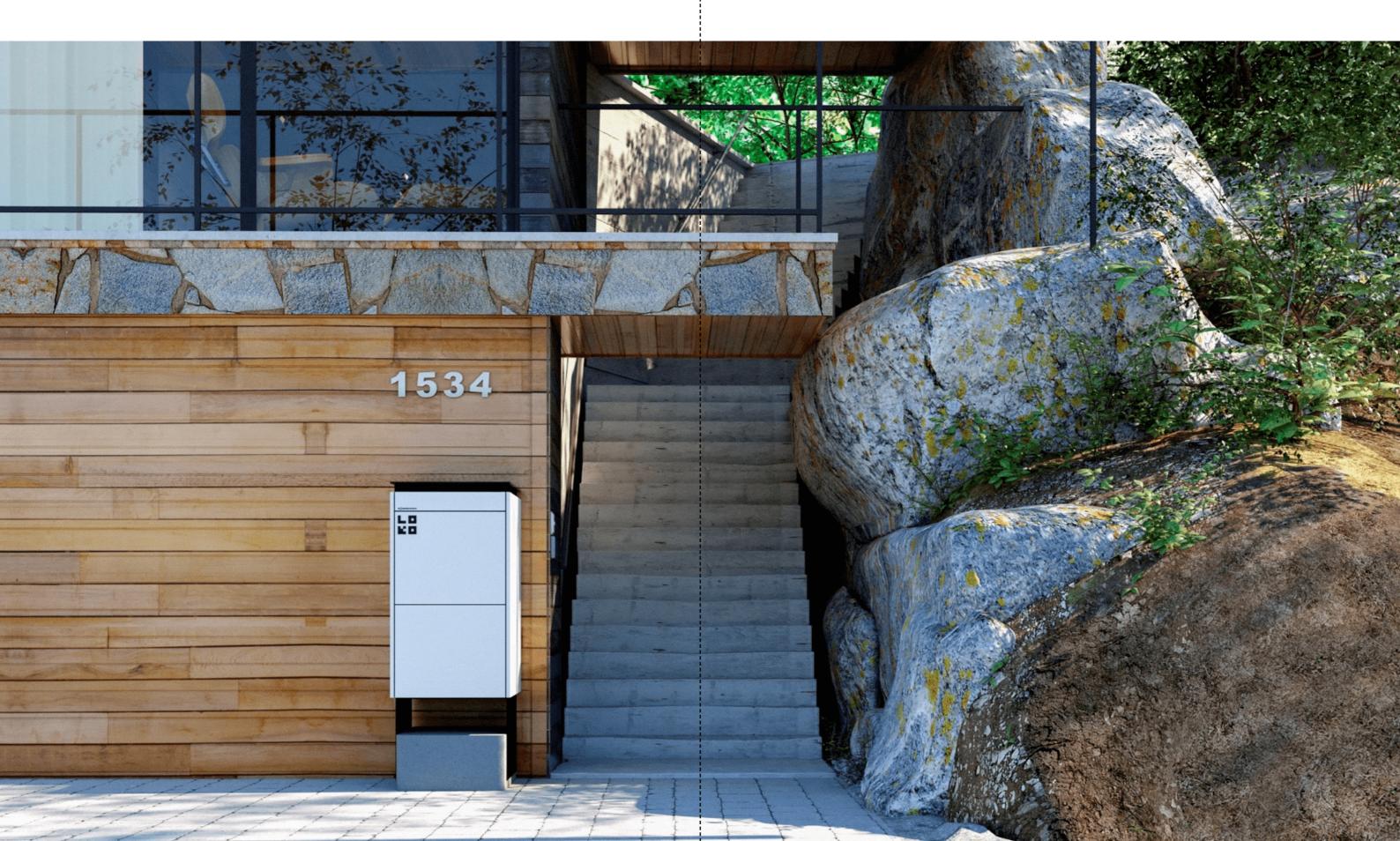
### Dimensions

\* All dimensions are in millimeters





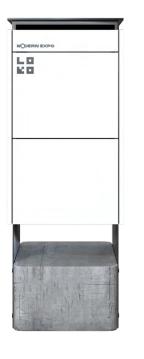
# LOCAL (CONCEPT)



LOCAL — personal parcel terminals, which provide fundamentally new delivery service at the last mile. For private houses.

### Modules

### Dimensions

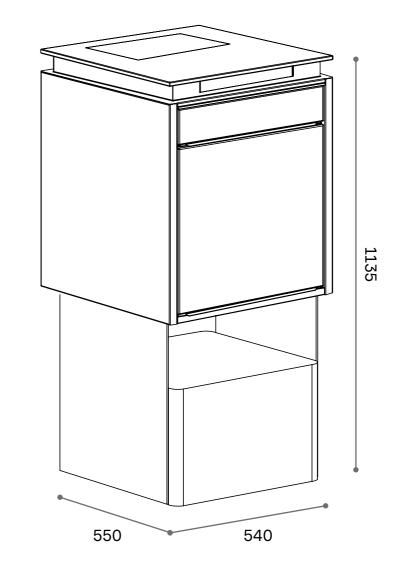




Rechargeable battery
 Metal body

3 Concrete box

\* All dimensions are in millimeters





71



### Allegro Poland

### > 1 000 lockers

Our parcel terminals have become a new modern possibility of the last mile delivery service that also embodies important social and public functions. Each parcel is decorated with 10 sq.m. plant walls, which cover either the front side or space around the locker.

Thus, Modern Expo's parcel terminals have become attractive elements of the urban environment, successfully integrating into its infrastructure. Furthermore, they transform public spaces into cozy green islets that purify the air. By the way, it is easy to confirm terminals' usefulness because each of them is equipped with an air quality sensor.





# Nova Poshta

### Ukraine

### > 5 000 lockers

Taking into consideration that logistics and delivery services directly affect energy consumption, our innovations are aimed at reducing negative impacts on the environment.

This solution works autonomously, using solar energy or rechargeable battery for power. Eco Logis parcel lockers operate on Bluetooth technology, which ensures the possibility of significantly reducing energy consumption.

# 67997 поштомат





### Sameday Romania

### > 1 250 lockers

Parcel terminals by Modern Expo for Sameday, which is the largest locker network in Romania.

Sameday, in turn, is a partner of the largest Romanian online retailer — eMAG company. One of the latest of their innovations was the development of their own parcel terminals network called EASYBOX.

The common portfolio of Modern Expo and Sameday includes already more than 1000 cases of the parcel terminals, which have already become integral parts of the European cities' infrastructure.





### **Voli** Montenegro

### **1** Pilot store

The biggest retail chain in Montenegro launched a pilot project with our Loko FRESH product with cooling and freezing cells.

It's become a popular retail strategy that allows customers to have the best of both worlds: online shopping and fast pick-up near store.



#### M\_DERN EXPO

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