

Hot & Cold Tray Service Carts for Hospital Patient Meals



KONEXT

“

If you settle for nothing less than your best compliance's, you will be amazed at what you can accomplish for your inpatients diet management and patient experiences.

”

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MYUNGSE CMK

Hot & Cold Tray Service Carts for Hospital Patient Meals



KONEXT



KONEXT

“For the bright future”



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“CUSTOMER SATISFACTION”



Since the establishment of Konext, in 1994, it exclusively focused on the development of high-quality tray service carts. The innovative patient-meal distribution system is made possible by the accumulated expertise of Konext and will improve hospital services and patient satisfaction.

BRAND VALUES



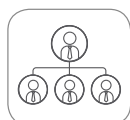
Incessant R&D with aggressive investment for successful long-term business



Provision of custom-made solutions



Practical and systematic product inspection



Systematic customer care through after-sales services



A first mover and a leader in Korea's domestic market



Increased exports based on overseas marketing

KONEXT STRENGTHS



Safety

They can be safely used for a long time, thanks to their various safety devices and strong structure.



Hygiene

They enable excellent temperature and hygiene control.



Convenience

They can be conveniently used, thanks to electromotive operation and integrated control system.

“PRODUCTS”



Interpretation of model names

The model names indicate the basic specifications of our products.

Components of a model name :

Model name - hot/cold function, tray capacity, and electromotive/manual drive

Model	Meaning
HA	Happy Cart
HA-EB	Happy Cart Basic
HA-EP	Happy Cart Prestige
HA-EPCU	Change-up (CU) model of EP is for installing lithium-ion battery in the future.
EMOS	EMOS (Emotion Service)
R	Return Cart
T	Tray
H	Hot
C	Cold
E	Electromotive

Example

- ☒ HA-HC40E : Happy Cart - hot/cold, 40-tray, electromotive
- ☒ HA-HC40EP : Happy Cart - hot/cold, 40-tray, electromotive, prestige
- ☒ EMOS-CS30E : EMOS - cook-serve, 30-tray, electromotive
- ☒ EMOS-CC20 : EMOS - cook-chill, 20-tray, manual
- ☒ HA-H40E : Happy Cart - hot, 40-tray, electromotive
- ☒ HA-T470 : Happy Cart - tray, width: 470 mm
- ☒ HA-R40 : Happy Cart - return cart, 40-tray, manual

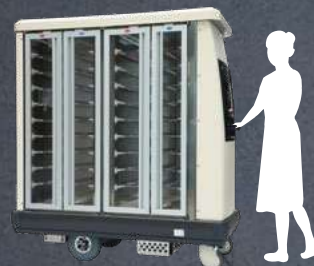
General light driving

Even when the cart is full of meals, it runs smoothly with a soft press of the forward-reverse lever.



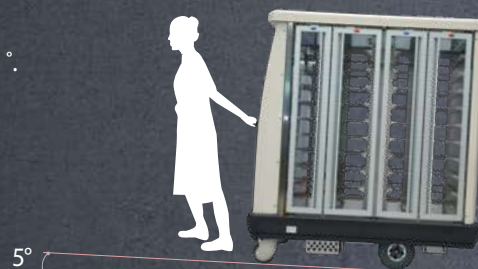
Reverse run that takes nearby persons into consideration

It can run safely, thanks to its reverse-run alarm function. Its touchscreen display enables rear-side viewing.



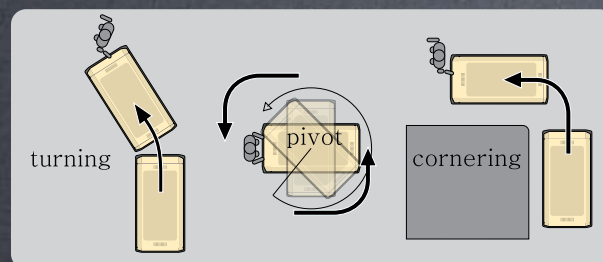
Stable run on sloped floor

It can smoothly run on slopes with a maximum inclination of 5°. Its speed can be automatically maintained at a constant when it runs downslope.



Easy turning

Its front casters, which rotate in several directions, enable easy turning.

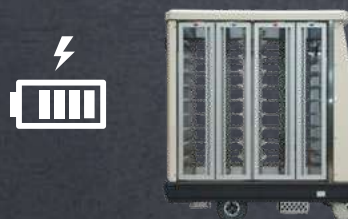


Safe battery charging

It is driven by battery.

When the battery is fully charged, an automatic control system is actuated to prevent overcharging.

* Its charging time and operation time may vary depending on the service environments.



Innovative electromotive driving system

It features maximized user convenience and satisfaction.

It runs smoothly even when it is fully loaded.



“HAPPY CART SERIES”



Standard models for the eastern food culture

The Happy Cart models feature hot/cold storage and electromotive operation systems to provide patients with fresh meals, thus improving user and patients satisfaction. Happy Carts, the representative products of KONEXT, have long been popular.

The company continuously upgrades its Happy Cart Series to improve user convenience.

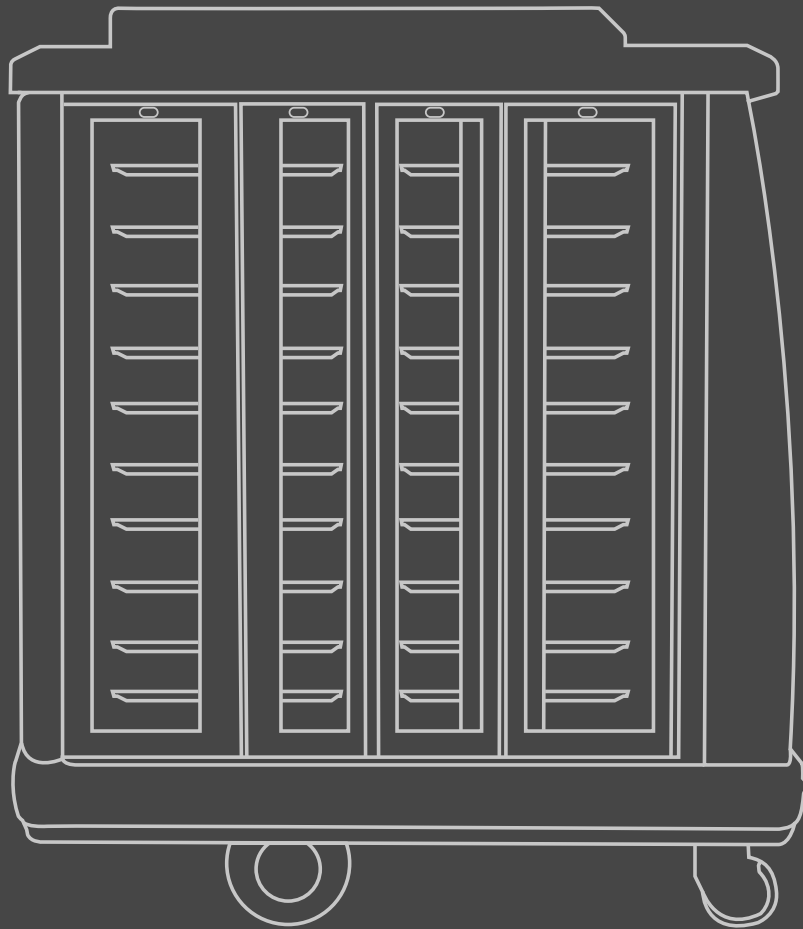
New Happy Carts are the current model with new functions added to the existing ones of the previous Happy Carts.

New Happy Carts (HA) include sub-models such as EB (Basic), EP (Prestige: always-on hot and cold) and EPCU (Prestige Change-up: Lithium-ion battery can be installed in the future).

* Exporting model for Happy Cart uses the tray model HA-T509

HAPPY CART Series

Happy Cart Basic(EB)
Happy Cart Prestige(EP)
Happy Cart Change-up(EP[CU])
Happy Cart Original



NEW



HAPPY CART BASIC



Chamber temperature array

General type (T470)	- - - C - H - C - H
Export type (T509)	- - - H - C - C - H

Precautions

Power	Wiring/Individual circuit breaker 30A, Industrial plug 32A		
Plug	 32A	OR	 16A Optional



Features of Happy Cart Basic and Prestige and Change-up

Product safety



Front and rear cameras with black box function (optional)

The cameras prevent collision by providing a view of the front blind spot, and enable recording that can be used as evidence in case a collision occurs.



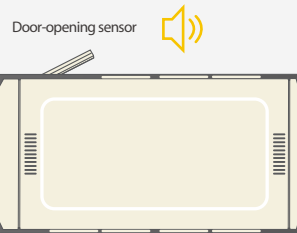
Ultrasonic collision-prevention sensor (optional)

Ultrasonic impact sensors prevent damage to the product from collisions with obstacles.



Motor reducer suspension

Absorbing impact to prevent damage to the reducer.



Door-opening sensor (optional), Door-locking (optional)

When the sensor detects an open door while the cart is running, the cart will automatically stop to prevent running while the door is open. Patient meals are protected from unauthorized persons.



Full water-level detection sensor (optional)

If the water level of the condensate tray approaches the full level, it is notified to the user in order to prevent condensate overflow.



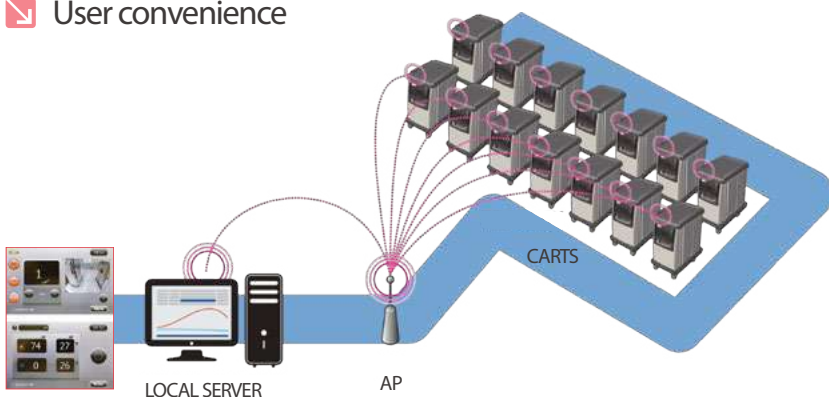
Integrated touchscreen control panel



USB for temperature data backup (optional)

Data of temperature changes in the chamber can be saved through a USB. Managing the temperature change is to follow the HACCP standards.

User convenience



Touch-screen Wi-Fi control panel (optional)

The centralized control panel provides user convenience. Temperature setting, patient meal information, automotive operation, time schedule, etc. can be collectively or individually controlled by a remote PC via Wi-Fi communications.

NEW

HAPPY CART PRESTIGE



Chamber temperature array

General type (T470)	
Export type (T509)	

Precautions

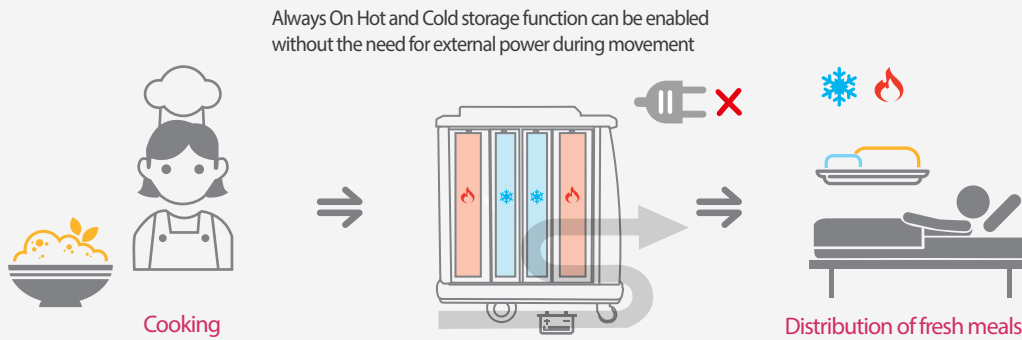
Power	Wiring/Individual circuit breaker 30A, Industrial socket 32A
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Additional functions of Happy Cart Prestige

- Its high-capacity Li-ion battery and high-efficiency hot/cold storage system enables constant hot/cold storage function during movement. As such, it can provide patients with hot/cold fresh meals at optimum temperature.

Always on hot and cold storage function can be enabled during movement.



Inverter function included

In case battery is discharged from DC power, it can be switched to AC power for using hot/cold and electromotive drive functions.

HAPPY CART EPICU

- Chamber temperature array and appearance are the same as Happy Cart Prestige
 - The lithium-ion battery can be installed for always-on hot and cold operation in the future
 - Power** : Available on wiring/individual circuit breaker 30A and industrial outlet 32A or 16A (1720 power cord). For installing lithium-ion battery it is essential to use power with wiring/individual circuit breaker 30A and industrial plug 32A



30A plug (Back-side)



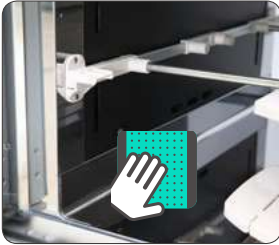
16A plug (Front-side)

Common Features of New Happy Carts

 User convenience



Easy operation of forward/reverse lever



Rounded inside corners that facilitate cleaning
Preventing dirt accumulation or germ growth at corners.



Manual switching lever on the control panel
Enabling driving for narrow space or when the battery is discharged.



"HACCP standards



meeting product"

 Product safety

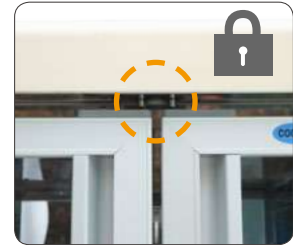
Touch Screen and front camera

Viewing the front blind spot on the touchscreen display.



One-touch door lock system (optional)

Patient meals are protected from unauthorized persons.



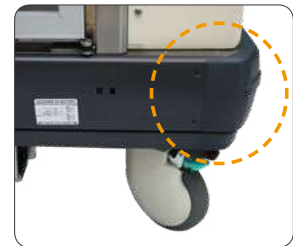
Emergency stop button and front touch sensor

In case of an emergency, the operator can stop the cart with the emergency stop button. Touching the front touch sensor lowers the speed when the user requires.



Urethane bumper

It absorbs external impact for protecting the body of the cart.



Wheel arrangement for safe driving





HAPPY CART ORIGINAL



Chamber temperature array

General type (T470)	
Export type (T509)	

Precautions

Power	Wiring/Individual circuit breaker 30A, Industrial socket 32A			
Plug	 32A	OR	 16A	Optional



Front-side of new model

Back-side of new model

Front-side of old model

Features of Happy Cart Original



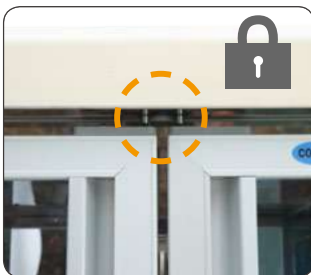
Monitor and front camera (optional)
Showing rear-vision.



Front touch sensor (optional)
Reducing the speed in emergency.



Back-driving alarm (optional)
Helping safe driving with the alarm sounding.



Door-locking system (optional)
Patient meals are protected from unauthorized persons.

Convenient centralized control panel

The key is to protect the device safely from the third party.



Electromotion control part



Hot/Cold storage control part

NEW Happy Cart EB, EP & EP[CU]



Model code	Width (mm)	Length (mm)	Height (mm)	Trays (pieces)	Rows (columns, rows)	Power consumption (kw)	Weight (kg)	Power supply
Happy Cart Basic(EB)								
HA-HC44EB	1630	770	1882	44	4,11	3.5	340	1P+E, 220V, 50/60HZ
HA-HC40EB	1630	770	1762	40	4,10	3.5	320	
HA-HC36EB	1630	770	1642	36	4,9	3.3	300	
HA-HC32EB	1630	770	1522	32	4,8	3.1	280	
Happy Cart Prestige(EP)								
HA-HC44EP	1630	770	1963	44	4,11	4.2	360	1P+E, 220V, 50/60HZ
HA-HC40EP	1630	770	1843	40	4,10	4.2	340	
HA-HC36EP	1630	770	1723	36	4,9	4.0	320	
HA-HC32EP	1630	770	1603	32	4,8	3.8	300	
Happy Cart Change-up(EP[CU])								
HA-HC44EPCU	1630	770	1963	44	4, 11	2.7	340	1P+E, 220V, 50/60 HZ
HA-HC40EPCU	1630	770	1843	40	4, 10	2.7	320	
HA-HC36EPCU	1630	770	1723	36	4, 9	2.5	300	
HA-HC32EPCU	1630	770	1603	32	4, 8	2.3	280	
Trays								
HA-T470	470	330	17	For domestic models		Colors: Camel, Pink, Green		
HA-T509	509	330	17	For overseas models		Colors: Camel, Pink, Blue		

The external dimensions and specifications are subject to changes for product improvement.

Happy Cart Original



Model code	Width (mm)	Length (mm)	Height (mm)	Trays (pieces)	Rows (columns, rows)	Power consumption (kw)	Weight (kg)	Power supply
HA-HC60E	2176	770	1762	60	6,10	4.0	430	3P+E, 380V, 50/60HZ
HA-HC54E	2176	770	1642	54	6,9	3.7	410	
HA-HC48E	2176	770	1522	48	6,8	3.4	390	
HA-HC40E	1526	770	1762	40	4,10	2.7	320	1P+E, 220V, 50/60HZ
HA-HC36E	1526	770	1642	36	4,9	2.5	300	
HA-HC32E	1526	770	1522	32	4,8	2.3	280	
HA-HC36	1526	770	1642	36	4,9	2.5	260	
HA-HC32	1526	770	1522	32	4,8	2.3	240	
HA-HC20	970	770	1762	20	2,10	1.8	180	
HA-HC18	970	770	1642	18	2,9	1.7	170	

Trays

HA-T470	470	330	17	For domestic models	Colors: Camel, Pink, Green
HA-T509	509	330	17	For overseas models	Colors: Camel, Pink, Blue

The external dimensions and specifications are subject to changes for product improvement.

“EMOS SERIES”



Electromotive drive model

Manual drive model

Superior temperature control

EMOS (emotion service) means that it provides a top-quality meal distribution system by addressing the emotions of patients and users. The EMOS series features hot/cold storage and electromotive driving for providing patients with fresh meals, thus improving user and patient satisfaction. Developed for the western food culture, the EMOS series is suitable for meals of western patients.

According to cooking environments of the hospital, this model can be applied for various kinds of temperature management systems and it has high temperature controlling performance.

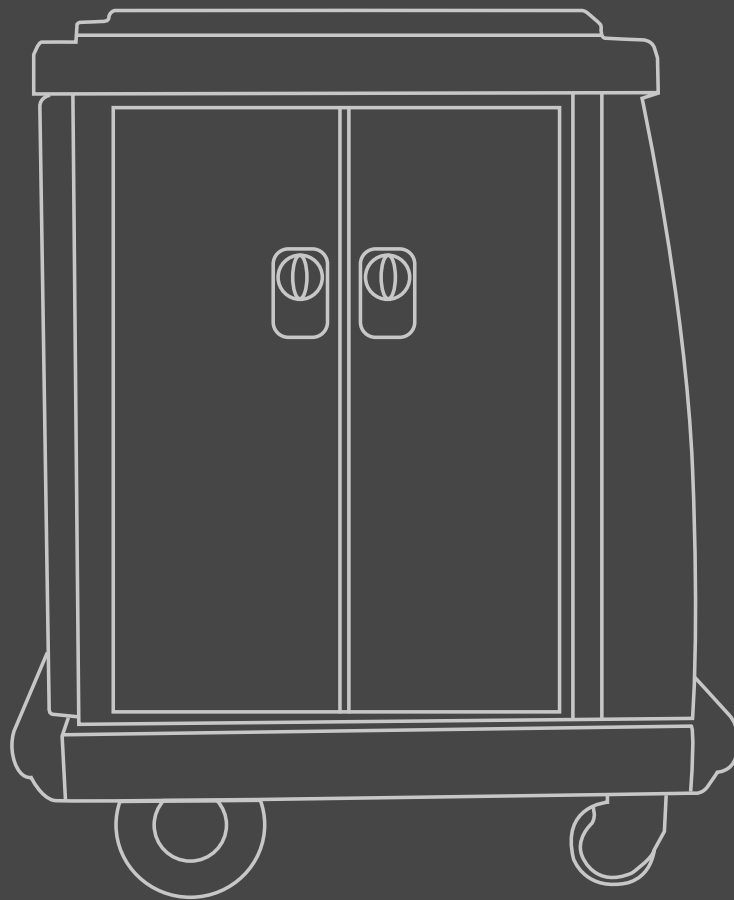
Depending on the users' requirements, the added functions of Happy Cart EB model are available as options.

EMOS Series

Electromotive drive model

Manual drive model

Cook-serve / Cook-chill



Product safety

" HACCP



Touch screen and front camera

Viewing the front blind spot on the touchscreen display.

* Electromotive only



One-touch door lock system (optional)

Clicking a button on the touchscreen display can simultaneously lock all the doors. As the door lock can only be cleared by a password, patient meals can be protected from unauthorized persons.

* Electromotive only



Emergency stop button and front collision sensor

In case of an emergency, the operator can stop the cart with the emergency stop button. In addition, the front collision sensor automatically stops the cart in case of a collision.

* Electromotive only



Urethane bumper

Absorbing external impact.

* Electromotive only



Wheel arrangement for safe driving



standards meeting product"



Anti-static handle



Precision-cast hinges
High-strength precision-cast hinges keep the doors stable.



Manual switching lever
This lever enables to switch to manual drive at narrow spaces or while battery is discharging.



Condensate drain valve



Circuit-breaker window



Safe pocket-type power cord holder



Common features of the EMOS series

☑ User convenience



Easy operation of forward/reverse driving lever



Rounded inside corners that facilitate cleaning

Preventing dirt accumulation or germ growth at corners.



Electromotive motor

The battery-powered motor enables easy control of the cart. Manual switching is possible.



USB for temperature data backup (optional)

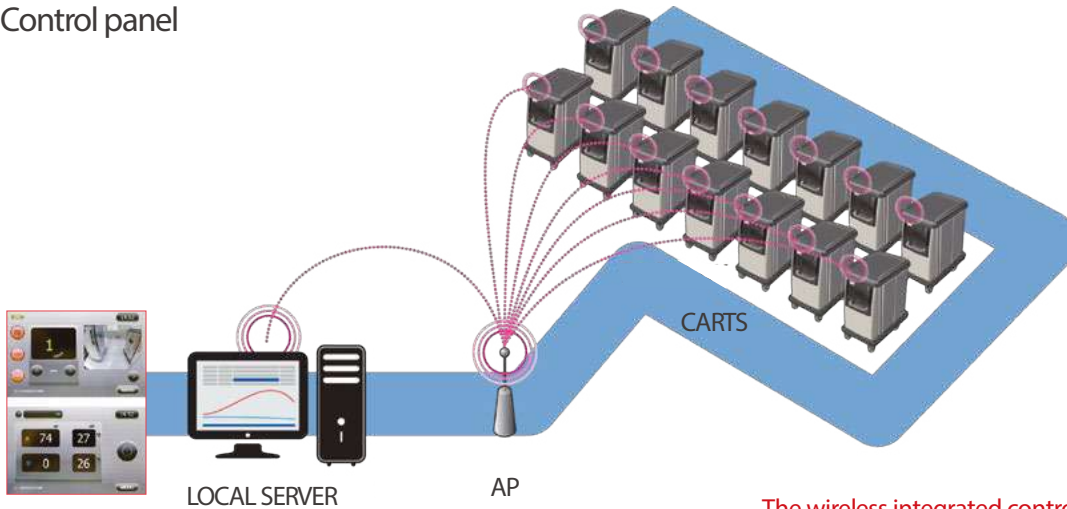
Data of temperature changes in the chamber can be saved through a USB. Managing the temperature change is to follow the HACCP standards.



Wide tray holder

The wide tray holders minimize thermal interference between the hot and cold storage mechanisms.

Control panel



The wireless integrated control system has acquired a patent in the US (US PATENT NO. 9,114,818 B2). (optional)

Electromotive) Touch-screen Wi-Fi control panel

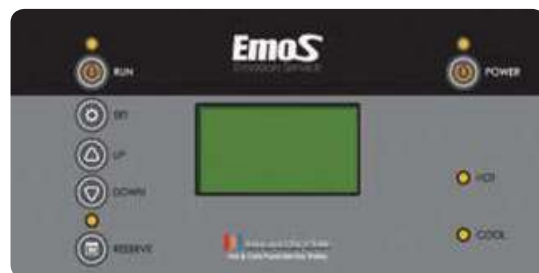
The centralized control panel provides user convenience. Temperature setting, patient meal information, automotive operation, time schedule, etc. can be collectively or individually controlled by a remote PC via Wi-Fi communications.

Manual drive model



Manual) Individual control

Current temperature display and temperature setting functions can be controlled individually.



Manual) Centralized control

Current temperature display, temperature setting, schedule setting, etc. can be controlled collectively.

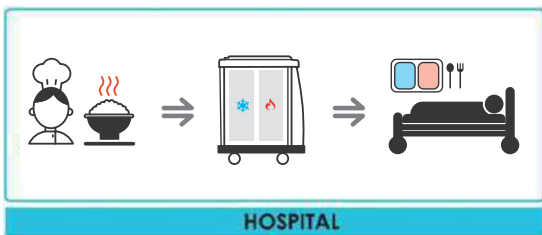
Temperature control system

The EMOS series was designed to satisfy the various temperature control requirements of users. Cook-serve and cook-chill types are available for the typical temperature control system. In addition, convection and conduction modes are available for the heating system.

* Temperature setting may vary depending on meals and cooking environments.

Cook-serve type

In this type, meals cooked in the hospital kitchen are moved to the cart preheated/chilled to the temperatures of 70°C and 5°C, respectively, for distribution.

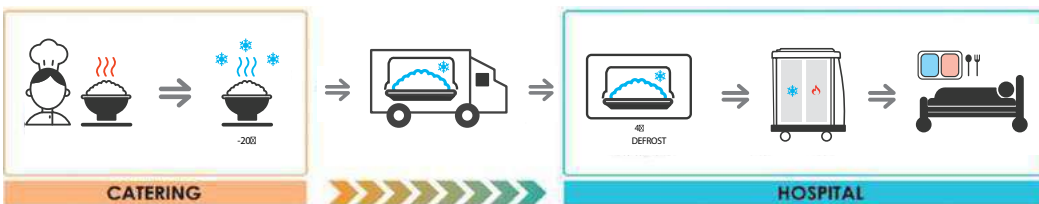


Recommended temperature setting :
70°C for hot storage, 5°C for cold storage,
and 20 minute for preheating/chilling time.

Before the cart is loaded with meals, it is preheated/chilled to the temperatures of 70°C and 5°C, respectively, for 20 minutes. This increases the efficiency of optimum-temperature meal distribution.

Cook-chill type

The temperature of the depths of frozen meals is first defrosted to 4°C, and then it is thawed again in the cart. The depths of stored hot meals should be 74°C. This is the temperature for protecting patient's meals according to the HACCP standards.



Recommended temperature setting :
140°C for hot storage, 2°C for cold storage,
and 1 hour for heating/chilling time.

The frozen meals supplied by a catering service company are first defrosted from -20°C to 4°C, moved to the hot-storage and cold-storage chambers, and heated/chilled to 140°C and 2°C, respectively, after an hour of operation. The final temperatures at the depths of the meals will be 74°C and 4°C, respectively, which are safe temperatures for hot/cold meals.

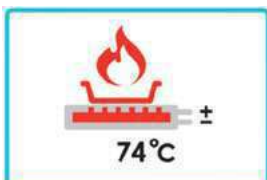
Heating system

Convection mode



This is the most common mode for heating meals using a hot-air blower.

Conduction mode



In this mode, the meals contained in the trays are heated by the trays that are heated by the hot plates mounted on the tray holders. This mode can minimize thermal loss, as well as increase meal temperature to a desired level within a short time.

Specifications of the EMOS series



Model code	Width (mm)	Length (mm)	Height (mm)	Trays (pieces)	Rows (columns, rows)	Inter-tray gap (mm)	Power consumption (kw)	Weight (kg)	Power supply
Cook-serve type									
EMOS-CS30E-80	1270	800	1778	30	2,15	80	3.9	370	1P+E, 220~240V, 50/60HZ OR 3P+E, 220~240V, 50/60HZ
EMOS-CS30-80	1200	800	1679	30	2,15	80	3.9	290	
EMOS-CS24E-96	1270	800	1778	24	2,12	96	3.9	370	
EMOS-CS24-96	1200	800	1679	24	2,12	96	3.9	290	
EMOS-CS24E-80	1270	800	1538	24	2,12	80	3.9	320	
EMOS-CS24-80	1200	800	1439	24	2,12	80	3.9	240	
EMOS-CS20E-96	1270	800	1538	20	2,10	96	3.9	320	
EMOS-CS20-96	1200	800	1439	20	2,10	96	3.9	240	
Cook-chill type									
EMOS-CC30E-80	1270	800	1778	30	2,15	80	8.7	370	3P+E, 220~240V, 50/60HZ
EMOS-CC30-80	1200	800	1679	30	2,15	80	8.7	290	
EMOS-CC24E-96	1270	800	1778	24	2,12	96	8.7	370	
EMOS-CC24-96	1200	800	1679	24	2,12	96	8.7	290	
EMOS-CC24E-80	1270	800	1538	24	2,12	80	6.9	320	
EMOS-CC24-80	1200	800	1439	24	2,12	80	6.9	240	
EMOS-CC20E-96	1270	800	1538	20	2,10	96	6.9	320	
EMOS-CC20-96	1200	800	1439	20	2,10	96	6.9	240	
Tray									
EMOS-T575	575	324	13	Only for cook-serve type				Color: Ivory	
EMOS-T575C	575	324	13	Only for cook-chill type				Color: Ivory	
Small Tray									
EMOS T530	530	324	13	Only for cook-serve type				Color: Ivory	
EMOS T530C	530	324	13	Only for cook-chill type				Color: Ivory	

The external dimensions and specifications are subject to changes for product improvement.

“CUSTOM-MODEL PRODUCTS”



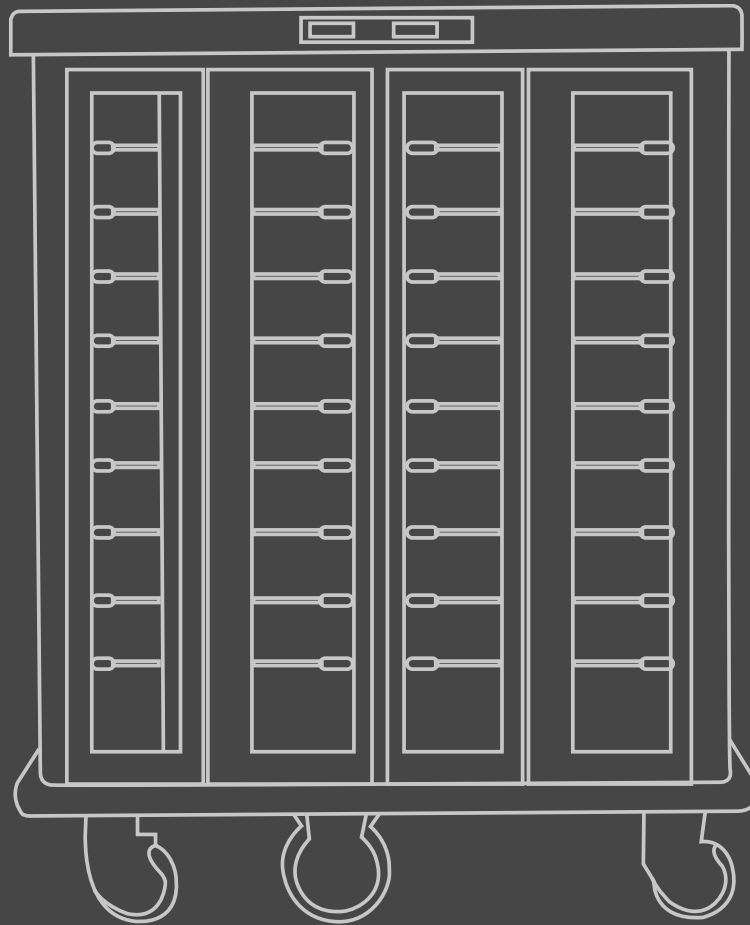
Based on the knowledge that we have accumulated for 20 years in one category of business, KONEXT can provide products with customized designs to meet various environments and user requirements.

Custom-Model Products

EMOS Lite

Happy Cart Hong Kong

Return Cart



EMOS Lite (Hot only & Manual Drive)

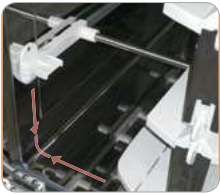
This model is mostly used in small /medium-sized hospitals and convalescent centers, which require simple optimum-temperature control and manual driving tray service carts.



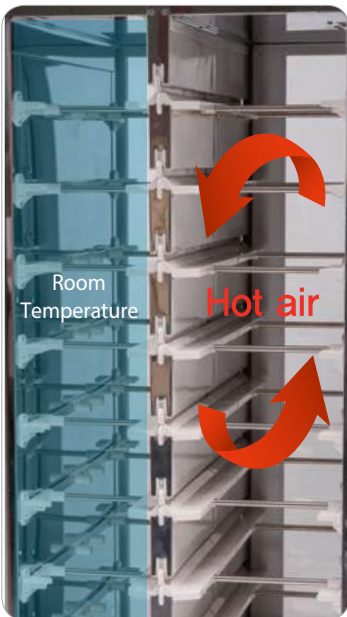
It features high economic efficiency by enabling temperature control in individual chambers, which reduces unnecessary energy consumption.



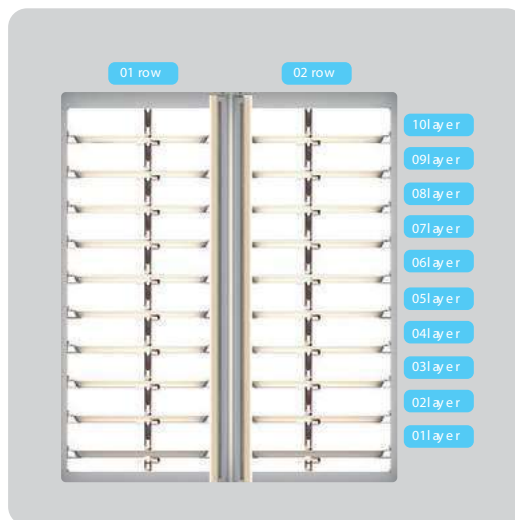
A shock absorbing round bumper



Rounded inside corners that facilitate cleaning

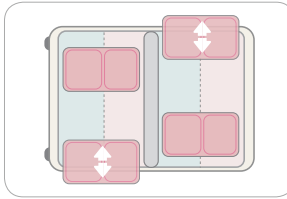


Even heat circulation by means of high-capacity circulating blower

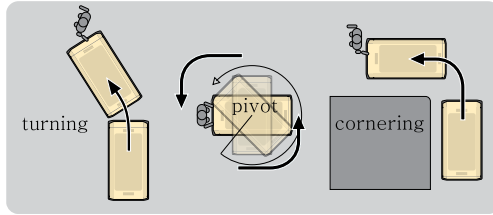


Hot/cold separation-type trays





Pass-through tray holders that facilitate meal distribution



With 3-column and 2-row casters, rotation radius is minimized. Moreover, it facilitates movement in narrow spaces.



Model code	Width (mm)	Length (mm)	Height (mm)	Trays (pieces)	Rows (columns, rows)	Power consumption (kw)	Weight (kg)	Power supply
EMOS LITE-H40	1360	780	1680	40	4,10	2.0	240	1P+E, 220V, 50/60HZ
EMOS LITE-H36	1360	780	1560	36	4,9	1.8	220	
EMOS LITE-H32	1360	780	1440	32	4,8	1.6	200	
Trays								
HA-T470	470	330	17	For domestic models		Colors: Camel, Pink, Green		

The external dimensions and specifications are subject to changes for product improvement.

Happy Cart Hong Kong

Happy Cart Hong Kong is designed for Hong Kong food culture on the basis of Happy Cart original model. It is heating-only electromotive driving model.



Model code : HA-H40E
Tray size : 350x270mm
Inter-tray gap : 98mm

Width (mm)	Length (mm)	Height (mm)	Trays (pieces)	Rows (columns, rows)	Power consumption (kw)	Weight (kg)	Power supply
1236	770	1470	40	4,10	2.86	270	1P+E, 220V, 50/60HZ

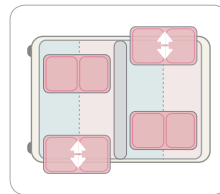
The external dimensions and specifications are subject to changes for product improvement.

Closed-type Return Cart

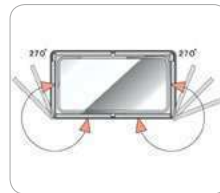
After optimum-temperature meal distribution, it can load trays and tableware and move them conveniently.



Magnet-type door-seal packing prevents food odor from being leaked out.



Pass-through stainless tray rails



The doors that can be opened to a maximum of 270°, thus enabling utilization of narrow spaces.



Low-noise hygienic casters

Composition

- Magnet-type door-seal packing door
- Rubber bumper



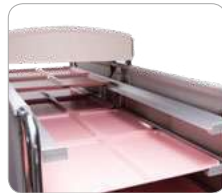
Model code	Width (mm)	Length (mm)	Height (mm)	Trays (pieces)	Rows (columns, rows)	Weight (kg)
HA-R40A	1240	760	1450	40	4,10	140
HA-R36A	1240	760	1350	36	4,9	130
HA-R32A	1240	760	1250	32	4,8	120
HA-R20A	750	760	1450	20	2,10	90

The external dimensions and specifications are subject to changes for product improvement.

☒ Applicable tray model for the return cart in the above is HA-T470. For different tray models, please contact us.

Open-type Return Cart

It provides space for returning trays after meals and keeps hospital wards pleasant.



Easy returning of trays and tableware after meals



Smooth turning and easy mobility



High spatial utilization as it can hold trays that are stacked in a small space



Waterproof curtains that can resist food infiltration and cover trays and tablewares

Composition

- Rotary wheel-type bumper
- Convenient round-shaped handle corner
- Wide rails with high spatial efficiency
- Closed-type curtain (optional)



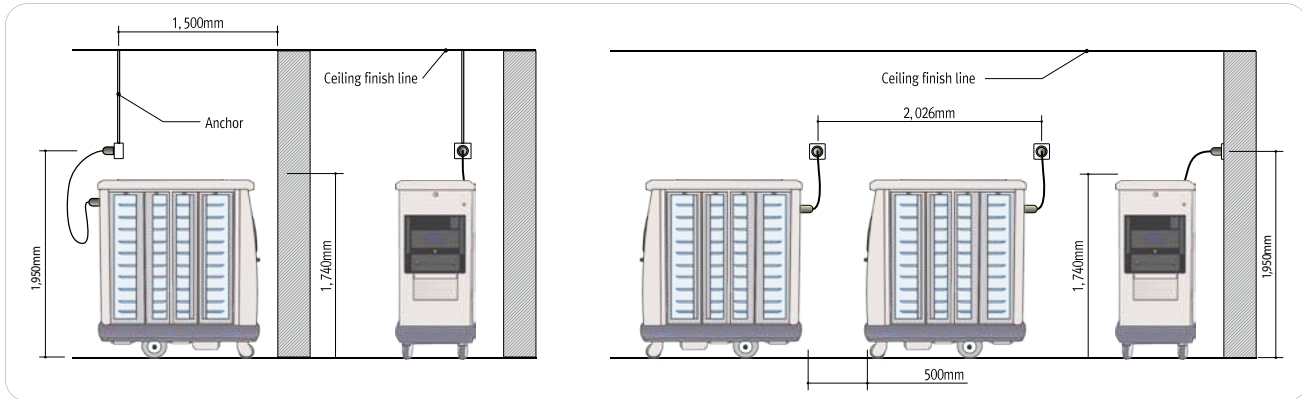
Model code	Width (mm)	Length (mm)	Height (mm)	Trays (pieces)	Rows (columns, rows)	Weight (kg)
HA-R40	1522	598	1574	40	4,10	45
HA-R36	1522	598	1464	36	4,9	43
HA-R32	1522	598	1354	32	4,8	41
HA-R24	1192	598	1354	24	3,8	35

The external dimensions and specifications are subject to changes for product improvement.

☒ Applicable tray model for the return cart in the above is HA-T470. For different tray models, please contact us.

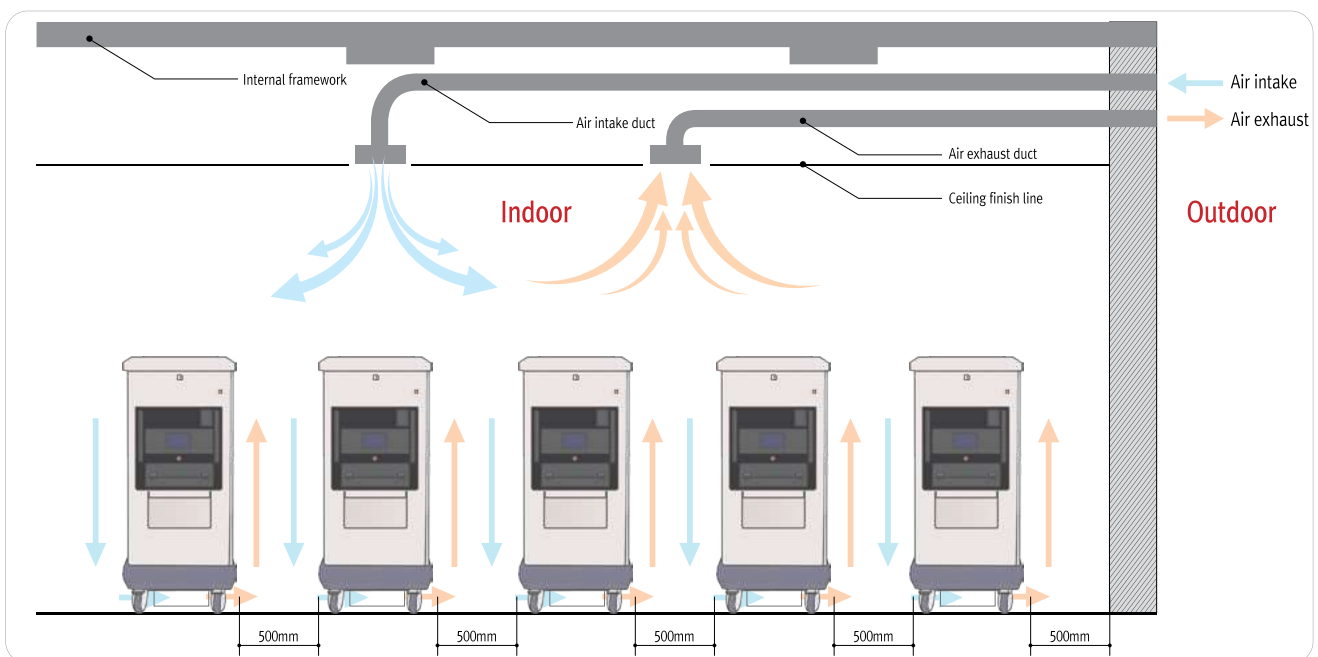
Precautions for installation

Example of power outlet installation <Only for the model Happy Cart EB>



- Depending on the service environment, you may install a ceiling- or a wall-type power outlet for the tray service cart.
- Make sure that you use a dedicated outlet that matches the rated voltage of the power cord.
- For each cart, install a circuit breaker with a 30A capacity.

Example of air-ventilation facilities



- For efficient indoor air circulation, we recommend organizing space for the cart and air intake/exhaust facilities.
- One 40-tray cart emits heat of approximately 3,100 kcal from the condenser.
(Calculate the total air ventilation volume by multiplying this value to the number of carts.)
As the value demonstrated above is the minimum recommended value for the 40-tray electromotive model, we recommend making more space than the minimum.

Precautions before purchasing

Incoming product and driving route

- Maximum capacity of the elevator : Total weight = (cart's weight * no. of carts) + total tray weight + total food weight + operator weight
- Incoming entrance, incoming route, sloped path, terminals, sewer, and elevator size
- Ensure sufficient indoor space in consideration of the rotation radius



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Company locations



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