evomulti

Evomulti is our thermo-refrigerated convection trolley with on-board technology for bulk food distribution.

Fields

Evomulti is intended for mass distribution in healthcare, especially for **long-term care facilities, in companies, schools and detention centres.**

hospitals and nursing homes

companies

schools

prisons

Category features

**01.** **BULK FOOD DISTRIBUTION**
The trolley is equipped with internal compartments and a worktop optimised for meal distribution with Gastronorm pans or grills.

02. **ACTIVE CONVECTION TECHNOLOGY**
Convection technology to preserve the organoleptic properties of meals both during temperature holding/boost (C&S) and regeneration cycles (C&C or C&F).

03. **ON-BOARD TECHNOLOGY**
Plug-in trolley that is flexible and easy to implement in any context. Equipped with an on-board computer for better workflow management and more efficient temperature monitoring in compliance with HACCP regulations.

Cook and serve
Workflow

What it is

The C&S work system involves the preparation of hot meals just before delivery, for each service. **Evomulti** ensures the correct temperature holding of meals from the moment they are prepared to when they are delivered to the guest.
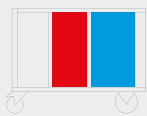
EVOMULTI C&S
ventilated hot compartment
ventilated cold compartment

01. PREPARATION

For each lunch or dinner service, meals are prepared in the kitchen or in a room used for this function.

02. LOADING PANS AND HOLDING CYCLE

When the first pans are inserted, **Evomulti** is connected to the power supply and, by selecting one of the various pre-programmed cycles, is able to hold the temperatures of the meals contained, thanks to the active convection system.

03. MOVING FROM KITCHEN TO THE SERVICE AREA

In this situation, **Evomulti** passively holds meal temperatures due to its perfect insulation.

04a. MOBILE MEAL DISTRIBUTION

Room by room service. Temperature passively held thanks to thermal inertia.

04b. MEAL DISTRIBUTION WITH STATIONARY TROLLEY

Distribution with stationary trolley in the dining room: self-service or at the table. Temperature held passively or actively connecting the trolley.
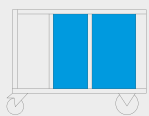
05. CLEANING

Once it returns to the kitchen, **Evomulti** is washed and sanitised, ready to be used for the next service.
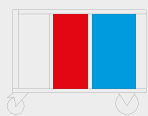
Cook and chill / Cook and freeze

Workflow

What it is

Evomulti when configured for C&C/C&F, features a multifunctional hot/cold compartment and a cold compartment, both ventilated.

cold compartment / cold compartment

hot compartment/ cold compartment

01. MEAL REMOVAL

Meals that have been previously cooked and blast chilled are removed from the stock.

07. CLEANING

Once it returns to the kitchen, **Evomulti** is washed and sanitised, ready to be used for the next service.

02. COLD PAN LOADING

Pans containing cold food are loaded in a controlled temperature area into **Evomulti** to be moved to the regeneration area.

06a. MOBILE MEAL DISTRIBUTION

Room by room service. Temperature passively held thanks to thermal inertia.

06b. MEAL DISTRIBUTION WITH STATIONARY TROLLEY

Distribution with stationary trolley in the dining room: self-service or at the table. Temperature held passively or actively connecting the trolley.

03. MOVING FROM KITCHEN TO THE REGENERATION AREA

In this situation, **Evomulti** passively holds meal temperatures due to its perfect insulation.

05. REGENERATION

The regeneration cycle automatically starts at the set time. The hot compartment heats up to regenerate the meal, while the cold compartment continues to keep cool.
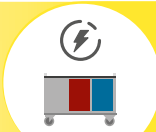
04. COLD MAINTENANCE

Evomulti actively holds the cold chain in both compartments when connected to the power supply.

EXTERNAL TRANSPORT

Optimal insulation for external transport on lorries or alternative vehicles.

Features

intelliflow

Work surface
Stainless steel surface that can be used as a support during service.

equalconvect

Push handles
Ergonomic and in an impact-proof position.

aluframe

Cable protection compartment
A secure place from which to store the cable while moving the trolley, when not in use. This ensures a drastic reduction of damage to the cable in the long term.

Internal chamber with rounded corners
Easy to clean thanks to its flush surfaces and wide corners, both internally as well as externally.

Perimetral bumpers
Designed to protect all parts of the trolley, especially the doors, even in an open position.

Heavy-duty castors
Available in a 4- or 6-castors model and configurable according to material type and braking system.

Design

Aesthetics

Premium, linear design available
in **Yellow** or **Blue.**

reddot award 2017
winner

In 2017, the trolley was awarded
the Red Dot Design Award,
one of the most coveted brands
in the design industry.

Functionality

Each part of the trolley remains inside
the original volume of the equipment,
including options:
• greater ergonomics and safety
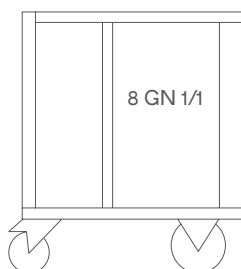 for operators;
• drastic reduction of damages.

Hygiene

The flush surfaces and wide corners limit
the accumulation of grime and make
cleaning easier, both internally and
externally. **Evomulti** is IPX5 certified for
the Open version and IPX4 certified for
the Bridge and Open Zeroeffort versions.

Sizes and capacities

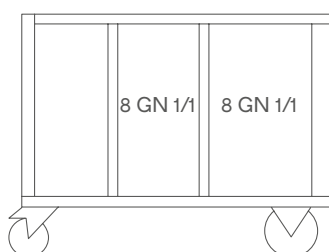---

Small (S)

Variation S1
1 chamber (8 GN 1/1)

8 GN 1/1

Small (S)

Variation S2
2 chambers (7 GN 1/1)

4 GN 1/1

3 GN 1/1
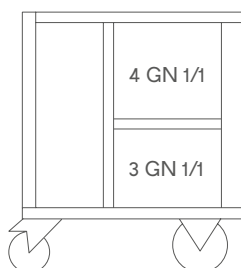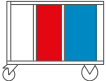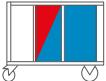
Large (L)

Variation L2
2 chambers (16 GN 1/1)

8 GN 1/1   8 GN 1/1

Configurations

Size	Code	Configuration	Compartment functions and capacities		Main electrical*/power** standards		
					400V 16A 3F+N+T	230V 16A 1F+N+T	230V 13A 1F+N+T
S1	S1.A		8		3025 W	3025 W	2450 W
	S1.C		8		3025 W	3025 W	2450 W
S2	S2.G		4	3	3025 W	3025 W	2450 W
	S2.J		4	3	3025 W	3025 W	2450 W
L2	L2.O		8	8	6850 W	3025 W	2450 W
	L2.R		8	8	6850 W	3025 W	2450 W

*Other electrical standards available for size L 230V 32A 1P+N+G / 230V 16A 3P+G / 230V 32A 3P+G 50Hz
**Power refers to the basic product configuration. The addition of electric option Zeroeffort Hybrid increases trolley power by 600 W.

Compartments available

Convection heating
(max 150°C)

Multifunctional convection
Mixed hot/cold compartment for regeneration (min -3°C max 150°C)

Static cold
(min. -3°C)

Standard technology

equalconvect

Equalconvect is the finest convection heating technology on the market due to an array of solutions that combine our know-how in aerodynamic flows and custom technical solutions for heat management.

- **Greater air flow rate** compared to market standards.

- Horizontal **airflow** and **optimised in** uniformity.

- **Axial fans** for smarter air distribution.
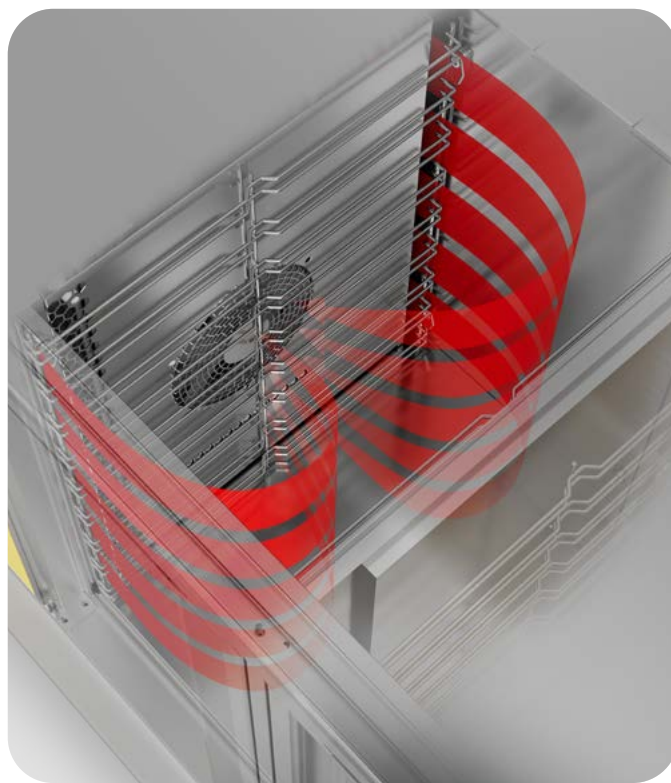
Greater versatility at your disposal
Equalconvect's extra airflow can be used both for optimising workflows with sprint cycles and for searching for optimum quality with low-temperature regenerations.

Balanced
A compromise between time-quality

Quality
Low-temperature regeneration

Speed
Sprint cycles

Temperature uniformity
Smart distribution of a greater quantity of air, compared to the market standard, conveyed in horizontal flows so as to reach each level uniformly.

Quality and makes food appetizing
Possibility of performing low-temperature regeneration to maintain the organoleptic properties of meals.

Energy saving
25% more efficient than the previous range.

aluframe

Borrowed from the world of aeronautics, **Aluframe** technology is the basis for developing a compact, lightweight, seamless perimetral frame with a structure formed by extruded anodised aluminium profiles interlocked by screwed corner joints.
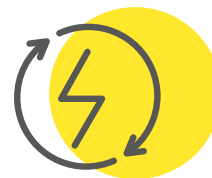
- Screwed profiles for **easy dismantling.**

- Perimetral frame for greater **compactness.**

- Aluminium: **3 times lighter than** steel without compromising on **sturdiness.**

- **Recycled** and **recyclable** aluminium.

- The aluminium profile is designed to facilitate **the total elimination of thermal bridges** with the internal stainless steel chamber.

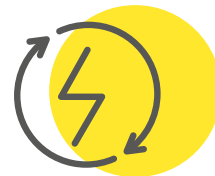**Ergonomics**
Aluframe reduces the weight of the trolley and ensures exceptional compactness, making it easier to handle.

Sustainable
The frame is made with recycled aluminium and is totally recyclable at the end of the product life.

Energy saving
Increased product life due to the possibility of replacing individual frame sections and improved thermal insulation to limit energy consumption.

ıntellıflow

Intelliflow is the new control system designed to be easily accessible and completely eliminate operating errors. Based on the Linux operating system, **Intelliflow** is our new solution for intuitive and simple control of the equipment, using a handy 7" touchscreen.

Simple and intuitive interface and ergonomic positioning of the screen in both the Open and Bridge trolley variations.

Extensive control and diagnostic system.

User friendly
User-experience improved by a software and hardware architecture that facilitates learning and minimises operating errors.

Safety
Extensive control/diagnostic system to monitor the proper functioning of the trolley according to HACCP standards.
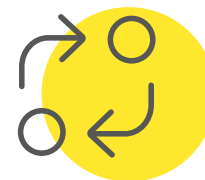
Connectivity
The possibility of connecting to peripheral devices or proprietary software, such as our **Communicator**, or even third parties, via the Linux operating system.

Optional technologies

communicator

Communicator is the software for monitoring distribution processes according to HACCP principles and for managing the equipment fleet. **Communicator** is available in two versions according to tracking needs: **Basic** and **Premium**.
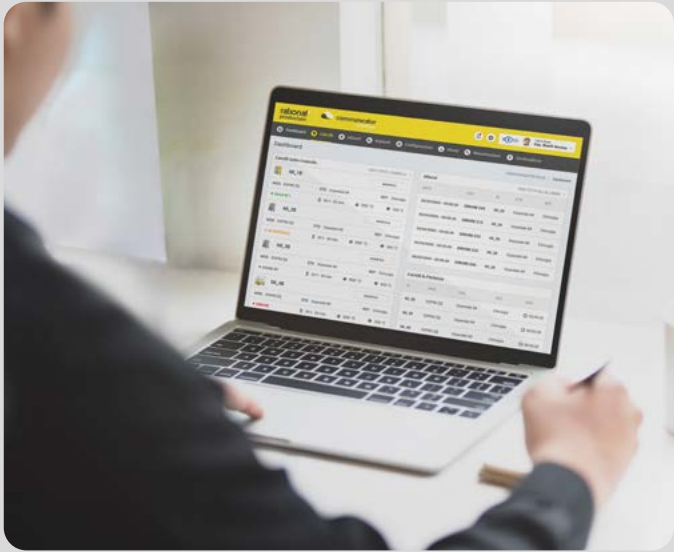
Communicator Basic
Entry-level, easy to install and use, economic, created to meet the needs of small facilities.

Functionality

Communicator Premium
Complete and real-time connectivity. It enables timely remote intervention, with the possibility of keeping data on the cloud or on a local server.

USB key	Functionality	Wifi
✔	*Communication Technology*	✔
✔	*Temperature Log*	✔
✔	*Alarm Log*	✔
✔	*Multi-system management*	✔
✔	*Personnel authorisationmanagement*	✔
✔	*Trolley programming back-up*	✔
✔	*Personalisation of alarms and operating instructions*	✔
✘	*Real-time monitoring*	✔
✘	*Remote control and programming*	✔
✘	*Installation on a local server (optional)*	✔

HACCP Safety
The possibility of monitoring and registering working temperatures, detecting any anomalies in advance, thus ensuring a high level of food safety and timely intervention by the operator.

Accessibility
With the cloud-based system, operators are able to access **Communicator** from any device in their possession.
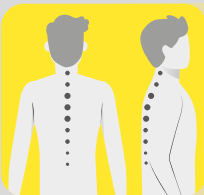
Economic savings
Reduced costs and reduced on-site intervention time by tracking equipment performance data and sharing it with accredited service centres.

zeroeffort

Zeroeffort hybrid is the patented solution that facilitates handling on level routes, provides electrical support to the operator's normal push, reducing effort to a minimum.

zero additional costs
The ZEROEFFORT optional feature allows the trolley to be handled by a single operator providing important savings on personnel costs.

zero MSD
Musculoskeletal disorders (MSDs) are one of the most common disorders related to handling. With zeroeffort technology, work-related MSD risks affecting the back, neck, shoulders, upper and lower limbs are minimised.

Intuitive
The control is integrated in the push handle for easy handling from the very first use.

Optimised
The 6-kg thrust provided by the electric motors allows the operator to move the trolley effortlessly.

Patented
The patented magnetic clutch allows use even in the event of a breakdown or with dead batteries.

Functionality

Technology	Magnetically driven electric motor
Motor power	100 W (x2)
Batteries	Lithium Iron Phosphate (LiFePO4)
Complete recharging time	1 hour (during regeneration cycle)
Battery autonomy	1 hour (continuous use) 2 hours (use during service)
Ingress protection code	IPX4
Noise level	<58 Db
Automatic uphill/downhill brake	✖
Manual handling	✔
Emergency button	✔
Patent	Patented by Rational Production

Options
Logistics solutions

Removable rack

The single chamber variations (S1 and L2) can be configured with a removable rack. The latter can be transferred inside the neutral and insulated **Evoserv Plus** shuttle.

This solution is ideal for centralised kitchens. The **Evoserv Plus** shuttle is used for passive cold holding until the rack is transferred into **Evomulti.**

Telescopic tow bar

This is used to move up to 4 trolleys at a time, connected to each other using the towing devices.

Options

## Open variation (standard)

Neutral work surface

AISI304 stainless steel worktop that can be used as a support surface during distribution or as a display during self-service.

Bridge variation (optional)

Top shelf and sneeze guard

Large additional and functional support surface at the top and glass front panel, designed to ensure maximum hygiene during distribution, without obstructing the view of the product.
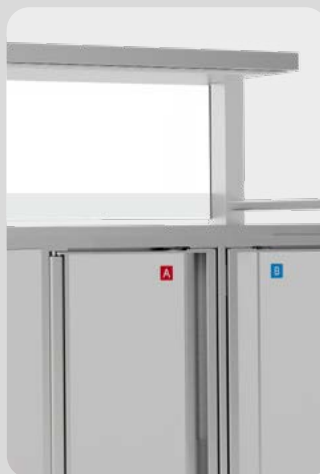
Heated work surface and lights

Heated worktop and heating lights, integrated in the trolley bridge, to ensure correct temperature maintenance during service.

LED lights

Additional lights, not heated, located on the bridge, to facilitate meal distribution even when the trolley is disconnected from the power supply.

Folding shelf and bag holder
Options available for both the
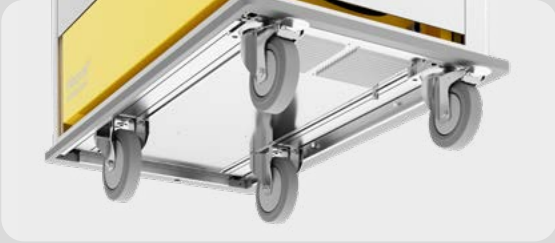Open and Bridge variations.

▬ Folfing shelf
Additional work surface that can be
used both when distributing meals
and collecting trays. Available on both
the short and long sides of the trolley.

▬ Bag holder
Each folding shelf can be fitted with
additional container supports/bag
holders, with up to a maximum of
4 per trolley.

Right bag
holder

Folding
shelf B

Left bag holder

Right bag
holder

Folding
shelf C

Folding
shelf A

Left bag holder

Castors

Quantity	4 *(standard)* 2 swivel Ø160 mm | 2 fixed Ø200 mm	6 *(optional)*: 4 swivel Ø160 mm | 2 fixed Ø200 mm

Brake type	Single brake *(standard)*	Centralised brake *(optional)*

Material	Galvanised iron*(standard)*	Stainless steel *(optional)*

Door lock
Locking of doors to prevent unauthorised persons from opening them.
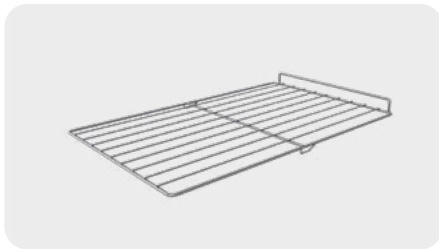

Work surface barrier
In addition to the two side barriers assembled on the worktop, **Evomulti** comes with one or two additional barriers so as to close off all sides of the surface.
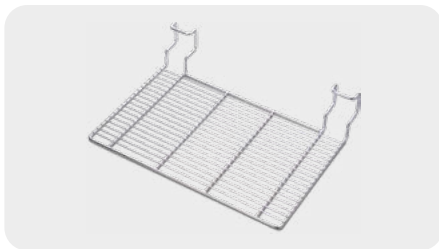
Accessories

Pans and lids
Complete range of Gastronorm
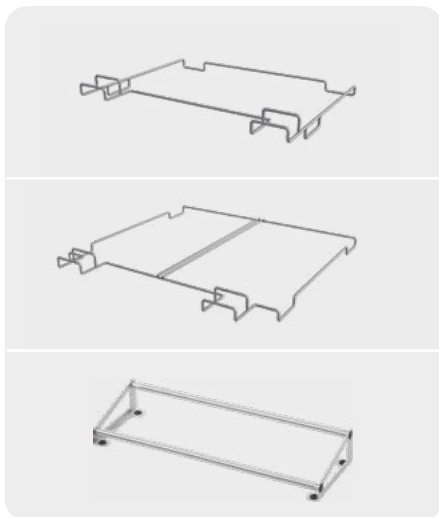pans and lids.

Grills
Additional support surface to hold
disposable containers or plates
in the hot and/or cold compartment.

Removable support grill
Additional support surface to hold plates
or containers. Not compatible in the
event the trolley is equipped with the
optional folding shelf.

GN container holder and display cabinet
Useful accessories to secure containers
placed on the worktop or on the shelf
of the light bridge and prevent them from
slipping during meal distribution.

External food core probe
Used to measure the core temperature
of foods, before or after the thermal cycle.

Technical data

Evomulti	S	L
Dimensions (Open)	863 x 760 x 956 mm	1297 x 760 x 956 mm
Dimensions (Bridge)	863 x 760 x 1391 mm	1297 x 760 x 1391 mm
Weight	95 kg	145 kg
Container capacity	8 GN 1/1 4 + 3 GN 1/1	8 + 8 GN 1/1 8 + 4 + 3 GN 1/1
Electrical power supply	220/400V or 380/230V | single- or 3-phase	
Frequency	50 / 60 Hz	
Power	from 2.45 to 7.9 kW	
Hot compartment maximum temperature	+150 °C	
Cold compartment minimum temperature	-3 °C	
Index protection code (IP)	IPX5 (IPX4 for Bridge versions with optional Zeroeffort hybrid)	
Certifications	CE, IEC CB Scheme	
Interior	Chambers and ventilation casing made of stainless steel with wide folding range and flush fitted joints for easy cleaning.	
Exterior	Heavy-gauge anodic oxidation-treated aluminium shell that is easily cleaned. Side guards made of thermoformed ABS. Impact-resistant HPL panels. Ergonomic push handles and in an impact-proof position.	
Control panel	Touch-screen display, 7 inches, with frame made of impact-resistant thermoformed ABS. 100 programmable thermal cycles.	
Castors (standard)	Heavy-duty castors with double precision ball bearings (2 swivel Ø160 mm with brake, 2 fixed Ø200 mm).	

rational
production

MEAL
DISTRIBUTION
SPECIALISTS

Rational Production srl
Via L. Galvani, 7/H
24061 Albano S. Alessandro (BG)
Italy

T. +39 035.452.1203
F. +39 035.452.1983
info@rationalproduction.com
www.rationalproduction.com