iHexagon® 6-1/1 E



Capacity
- 6 lengthwise insertion for 1/1 GN-Accessories
- Removable standard racks with 68 mm insertion distance
- Wide range of accessories for various cooking processes such as grilling, braising or baking
- For use with 1/1, 1/2, 2/3, 1/3 GN-Accessories

Manual combi-steamer mode
- Steam 30 °C – 130 °C (with Powerstream function)
- Convection 30 °C – 300 °C
- Combination of steam and convection 30 °C – 300 °C
- Optionally accelerated with microwave energy in the range 30 °C - 260 °C

Description

Intelligent, connectable cooking system with the operating modes poultry, meat, fish, egg dishes/desserts, side dishes/vegetables, baked goods and finishing as well as the cooking methods roasting, cooking, baking and grilling.
- Combi-steamer in accordance with DIN 18866 (in manual mode).
- For most cooking processes used in professional kitchens.
- For the use of steam and convection, individually, successively or together, each accelerated with microwave as an option.

The following intelligent assistants are available:

Intelligent assistants

iClimateBoost iCookingSuite iProductionManager iCareSystem AutoDose

iClimateBoost
iClimateBoost is the iHexagon's intelligent climate management system. Thanks to the interaction of sensors, high-performance heating system, fresh steam generator, active dehumidification and intelligently controlled microwave energy, the right climate is always available. Intelligent air circulation and uniform microwave distribution on all 6 levels ensures the best possible energy input into the food. This therefore ensures exceptional productivity with high food quality, uniformity and minimal energy consumption.

iCookingSuite
The iCookingSuite is the cooking intelligence in the iHexagon. Initially, the user selects the cooking path from 7 operating modes and/or 4 cooking methods to suit the food. The desired cooking result is also specified by the user. The unit suggests browning and cooking degree adjustments. Intelligent sensors recognise the size, quantity and condition of the food. Depending on the cooking progress, all important cooking parameters such as temperature, climate, air speed, microwave energy and cooking time are adjusted to the second. The desired result is achieved with the best possible quality and in the shortest possible time. If desired, you can interrupt the cooking process and adjust the cooking result. The user can switch to iProductionManager or manual mode at any time. With iHexagon's iCookingSuite, significant time savings can be achieved in a simple way, without monitoring - with high, standardised food quality.

iProductionManager
The iProductionManager organises the production process intelligently and flexibly. This includes which products can be cooked together on different inserts, the optimal order of foods and the monitoring of the cooking process. The iProductionManager supports you with information on inserting or removing dishes. Depending on the cooking process, the tickets can be placed anywhere or can be aligned with a specific target time. The iProductionManager arranges the food sequence accordingly and automatically makes the correct settings. Portioned food can also be brought to consumption temperature quickly and easily. Simple monitoring tasks are eliminated, time is saved and productivity easily covers peak periods.

iCareSystem AutoDose
The iCareSystem AutoDose is the intelligent cleaning and descaling system in the iHexagon. It recognises the current degree of dirt and calcification and suggests the ideal cleaning level and chemical quantity from 9 cleaning programmes. The ultra-fast interim cleaning system cleans the cooking system in just 17 minutes. All cleaning programmes can also run unsupervised overnight. If desired, the cooking system will then switch off automatically. With a low consumption of phosphate-free and microplastic-free care products, water and energy, the iCareSystem is particularly economical and environmentally friendly. This keeps your cooking system hygienically clean without any manual work and at a minimal cost. The iCareSystem Autodose cleaning system also enables fully autonomous cleaning with minimal contact with cleaning agents.

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Unit description and functional features

Intelligent functions
> Intelligent climate management with accurate moisture measurement, setting and control
> The actual measured humidity in the cooking chamber can be set and retrieved
> Dynamic air circulation in the cooking cabinet thanks to intelligently reversing high-performance fan wheels with 5 fan wheel speeds, intelligently controlled and manually programmable
> Intelligent regulation of the cooking paths to achieve the desired user-defined result, e.g. browning and cooking level, reliably, efficiently and as quickly as possible, regardless of the user, the size of the food or the load quantity. Automatic adjustment of cooking steps and cooking parameters such as temperature, time, air speed and microwave power
> Intelligent microwave power regulation to one percent accuracy
> Dynamic microwave distribution in the cooking cabinet with two microwave generators and intelligent power supply units
> Monitoring and calculation of browning to the second based on the Maillard reaction and the internal cooking process, in order to achieve optimal cooking results in a reproducible manner
> Interrupt intelligent cooking paths or switch from the iCookingSuite to the iProductionManager for maximum flexibility
> Intelligent cooking path for proving baked goods
> Individual, intuitive programming by drag-and-drop of up to 1,200 cooking programs with up to 30 steps.
> Automated, intelligent planning and control tool iProductionManager for the optimal organisation of several cooking processes and mixed loads. Automatic closing of planning gaps. Automatic time or energy optimisation of the planning and target time cooking, in order to start or stop cooking at the same time. Full microwave power mode can be activated for quick cooking at peak times.
> Optical signalling of loading and removal requests with energy-saving LED lighting.
> Automatic recommencement and optimal completion of a cooking sequence after power failures that last less than 15 minutes
> Intelligent cleaning system suggests cleaning programmes and required amount of care products based on the degree of dirt of the cooking system
> Display of the current cleaning status and the descaling status
> Easy creation and transfer of programmes (cooking programs and cleaning programs for iCareSystem AutoDose) and shopping carts to and from other RATIONAL cooking systems thanks to secure cloud connection with ConnectedCooking or via USB flash drive
> Condensation hoods (accessories) with situation-specific customisation of suction power and transmission of service messages

Cooking functions
> High-performance steam generator for optimal steam performance even at low temperatures below 100 °C
> Fastest possible cooking by combining high heating output, microwave power and steam
> Accelerated manual convection cooking, steaming or combi-steaming with microwave support, selectable in 5 levels
> Power Steam function: increased, continuous steaming power can be selected for regional applications such as dim sum
> Integrated, maintenance-free grease separation system with no additional grease filter
> Cool-down function for rapid cooling of the cooking cabinet with selectable, additional rapid cooling by means of water injection
> Core temperature probe with 6 measuring points as well as automatic error correction in the event of false readings.
> Delta-T cooking for particularly gentle preparation with minimal cooking losses
> Exact steaming, water volume adjustable in 4 levels in the temperature range from 30 °C - 260 °C for convection or a combination of steam and convection
> Digital temperature display adjustable in °C or °F, display of target and actual values
> Digital display of the cooking chamber humidity and time, display of target and actual values
> Time format adjustable in 24-hour format or am/pm
> 24-hour real-time clock with automatic conversion from summer to winter time when connected with ConnectedCooking
> Automatic pre-selected starting time with variable date and time
> Integrated hand shower with automatic return and switchable spray and single jet function
> Energy-saving, long-life LED lighting in the cooking cabinet with high colour rendition to enable quick recognition of current state of food

Operation
> High-resolution 10.1" TFT colour display and capacitive touchscreen with self-explanatory symbols for simple, intuitive operation and control using sweep or swipe movements
> Acoustic prompt and visual display when user intervention is required
> Central dial with push function for intuitive selection and confirmation of entries
> More than 55 languages are configurable for the user interface and help function
> Basic cooking preferences of the country-specific cuisine can be selected, regardless of the language set for the unit. Another country-specific cuisine can be selected
> Specially adapted cooking parameters for international or country-specific dishes can be selected and started, regardless of the language set for the unit
> Search assistant to quickly find cooking functions, usage examples, programs, planning and settings
> Easy selection of cooking paths over 7 cooking modes and/or from 4 cooking methods
> Cockpit function to display information about the processes within a cooking path
> Customisation and control of user profiles and access rights via MyDisplay for simple and secure operation without user errors
> Interactive messages about cooking paths, calls to action, intelligent functions and warnings with the Messenger

Occupational and operational safety
> Electronic safety temperature limiter for steam generator and convection heating
> Safety door lock with sure shut function and manual locking for ergonomic, safe operation
> Integrated fan wheel brake
> iCareSystem Autodose cleaning system: use of cartridges for cleaning and care function. No contact with daily cleaning and care products
> Tested according to national and international standards for unsupervised operation
> Maximum rack height not higher than 1.6 m when using a RATIONAL stand

Networking
> Integrated, IP-protected Ethernet interface for wired connection to the cloud-based networking solution ConnectedCooking

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- Integrated WLAN interface for wireless connection to the cloud-based networking solution ConnectedCooking
- Integrated USB interface for local data exchange
- Central unit management, recipe, shopping cart and programme management, HACCP data management, maintenance management by means of the cloud-based networking solution ConnectedCooking

Installation, maintenance and environment

- Professional installation by certified technicians recommended by RATIONAL
- Fixed wastewater connection according to relevant standards (SVGW, WRAS)
- Customisation to the installation location (height above sea level) with automatic calibration
- Operation without water softeners and without additional manual descaling is possible
- Installation flush with the floor and wall by connection in the base area*
- Service diagnosis system with an automatic indicator of service messages and a self test function for active assessment of cooking system functions
- Remote diagnosis with ConnectedCooking by certified RATIONAL Service Partners
- RATIONAL 2 year warranty including parts, labour and travel **
- Regular maintenance is recommended. Maintenance in accordance with the manufacturer's recommendation by RATIONAL Service Partners

* For details, see installation and planner documentation

** Terms and conditions apply, see manufacturer's guarantee policy on the website www.rational-online.com

Cleaning and care

- Automatic cleaning and care system for cooking cabinet and steam generator, independent of the mains pressure
- 9 cleaning programmes for unsupervised cleaning, even overnight, with automatic cleaning and descaling of the steam generator
- Ultra-fast cleaning in just 12 minutes for almost uninterrupted, hygienic production
- Automatic safety routine after a power failure ensures a detergent-free cooking cabinet even after the cleaning has been cancelled
- Hygienic, floor-level installation without feet for easy, safe cleaning
- 3-pane cooking cabinet door with rear ventilation, heat-reflecting special coating and swivelling interior pane package for easy cleaning
- Material inside and outside stainless steel DIN 1.4301, seamless hygienic cooking chamber with rounded corners and optimised air flow
- Easy and safe external cleaning thanks to glass and stainless steel surfaces as well as protection against water jets from all directions due to IPX5 protection rating
- Monitoring option for automatic cleaning by means of the cloud-based networking solution ConnectedCooking
- iCareSystem AutoDose cleaning system with up to four cartridges for autonomous cleaning with minimal contact with cleaning agent

Options

- Energy optimising system connection
- Connection to operations monitoring (potential-free contacts)
- Control panel protection
- Lockable control panel
- Omission of hand shower

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Technical specifications

Dimensions and weight

Dimensions (W x H x D)	
Cooking system (body)	966 x 854 x 931 mm
Cooking system (complete)	966 x 899 x 998 mm
Cooking system with packaging	1130 x 1066 x 1080 mm
Maximum working height top rack*	1.60 m

*with use of an appropriate RATIONAL base frame

Weights	
Maximum loading quantities/rack	15 kg
Maximum total loading quantities	30 kg
Weight electric unit without packaging	154 kg
Weight electric unit with packaging	187 kg

Connection requirements electric

Voltage 3 AC 208 V	
Electrical connected loads	20.4 kW
Steam mode output	9.0 kW
Convection mode output	17.3 kW
Microwave power	2.6 kW
Fuse	60 A
RCD model	B

Voltage 3 AC 220 V	
Electrical connected loads	20.1 kW
Steam mode output	9.8 kW
Convection mode output	17.0 kW
Microwave power	2.6 kW
Fuse	63 A
RCD model	B

Voltage 3 NAC 400 V	
Electrical connected loads	20.1 kW
Steam mode output	9.0 kW
Convection mode output	17.0 kW
Microwave power	2.6 kW
Fuse	32 A
RCD model	B

Voltage 3 NAC 415 V	
Electrical connected loads	21.1 kW
Steam mode output	9.6 kW
Convection mode output	18.2 kW
Microwave power	2.6 kW
Fuse	32 A
RCD model	B

Connection requirements water

Water inlet (pressure hose) respectively	G 3/4
Water pressure (flow pressure) respectively	1.0 - 6.0
Maximum flow rate per cooking system	12.0 l/min
Water outlet respectively	DN 50
Max. short-term waste water quantity	0.4 l/sec

Only use temperature-resistant waste water pipes

Connection conditions exhaust air and thermal load

Latent heat load	2,950 kJ/h
Sensible heat output	3,580 kJ/h
Noise level (electric)	63 dB(A)

Connection requirements data

LAN data interface	Ethernet RJ45, CAT6
WiFi data interface	WiFi 802.11 b/g/n (2,4 GHz)

Minimum clearances during installation

Minimum clearance	Left	Back	Right
Standard	50 mm	0 mm	0 mm

Installation conditions

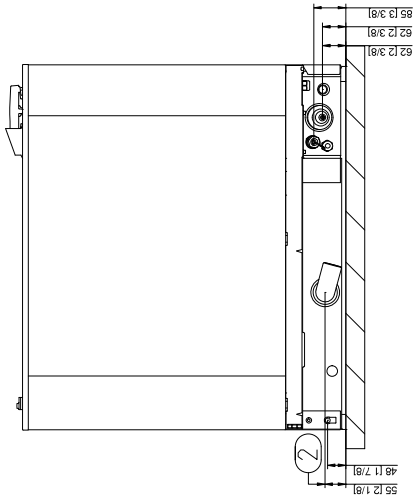
> If heat sources are acting on the left side of the unit, the clearance must be at least 350 mm. If heat sources are acting on the right side of the unit, the clearance must be at least 100 mm.
> Specific national and regional standards and regulations which concern the installation and operation of commercial cooking appliances must be complied with. The local standards and regulations for ventilation systems must be adhered to.
> To use ConnectedCooking, a RJ45 network access point or the option to integrate into a WLAN (IEEE 802.11 a/g/n) must be provided on site. A data rate of at least 100 MB/s should be provided for optimal performance.

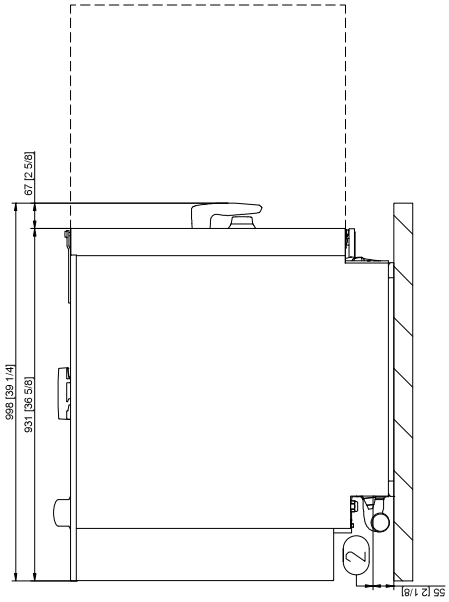
Approvals/declarations

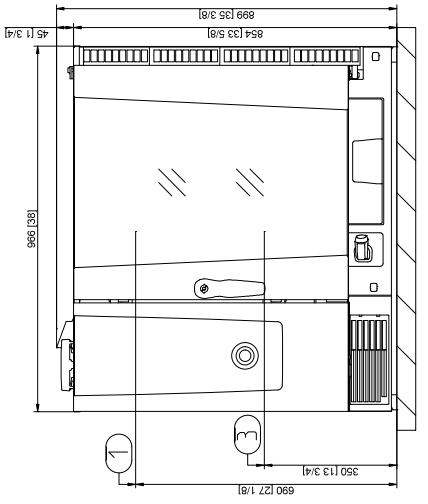
NSF certification

The iHexagon (LM400) is NSF-certified, which can be seen on the NSF list.

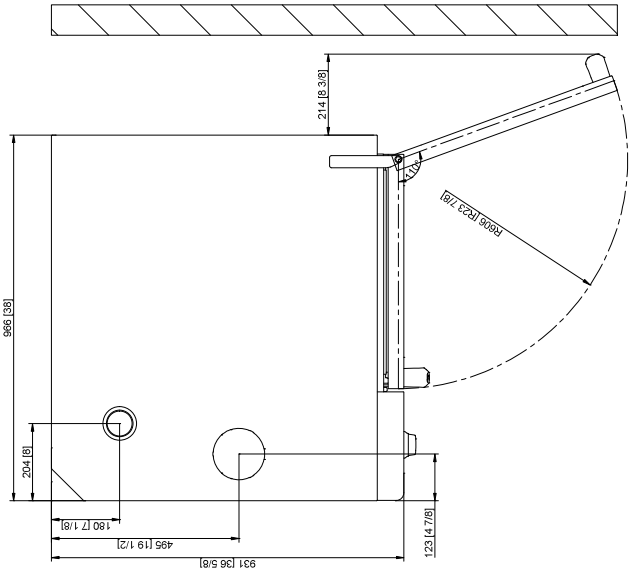
Technical drawing







Mindestabstand bei Wandaufstellung (rechts)
Minimum distance for wall installation (right)
Distance minimale pour l'installation murale (droite)



Information/Information	Anschlussplan/Connection diagram/Plan de connexion	
Zeichnungsausdruck unterliegt nicht dem Änderungsdienst! Printed drawing is not automatically updated! La mise à jour n'est pas assurée sur les plans papier!	iHexagon 6-11 E (master view)	
	Datum/Date/Date	01.09.2023
	Ersteller/Creator/Créateur	RATIONAL AG 2023
©RATIONAL AG 2023	Maßstab/Scale/Echelle	1:1
	Abmessungen/Dimensions/Dimensions	mm [inch]

Revision/Revision/Révision				
Index	Datum/Date/Date	Name/Name/Nom	Nr./No.	Beschreibung/Description/Description
1			1	Höhe oberster Einschub / Height of top rail / Hauteur du niveau d'insertion supérieur
2				
3			2	Höhe Wasserablauf oberes Gerät / Drain height upper unit / Hauteur évacuation des eaux usées de l'appareil supérieur
4				
5			3	Einfahrhöhe Gerät / Unit access height / Hauteur du seuil de chargement
6				

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Accessories

Accessories	Article number
RATIONAL Active Green cartridges - guarantees the best cleaning performance	
RATIONAL care cartridges - effectively prevents limescale deposits	
Unit installation kit	
Stands in different versions	
Mobile kit with rollers and height adjustment for floor installation	
Heat shield - to install a unit next to a heat source, e.g. a grill	
Condensation breaker - to divert steam and vapours into existing exhaust systems	
Levelling kit to compensate for height differences and gradients in floor installation	
Combi-Duo kit - to build a Combi-Duo consisting of 2 iHexagon or with one iCombi Pro or iCombi Classic cooking system	
UltraVent recirculating hood - for iHexagon 6-1/1	
UltraVent recirculating hood - for iHexagon 6-1/1	
RATIONAL USB 3.0 flash drive – for the secure transfer of cooking programs and HACCP data	

To achieve an optimal cooking result, you will find a wide range of cooking accessories and information on additional accessories in the accessories brochure, from your distributor or at www.rational-online.com

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