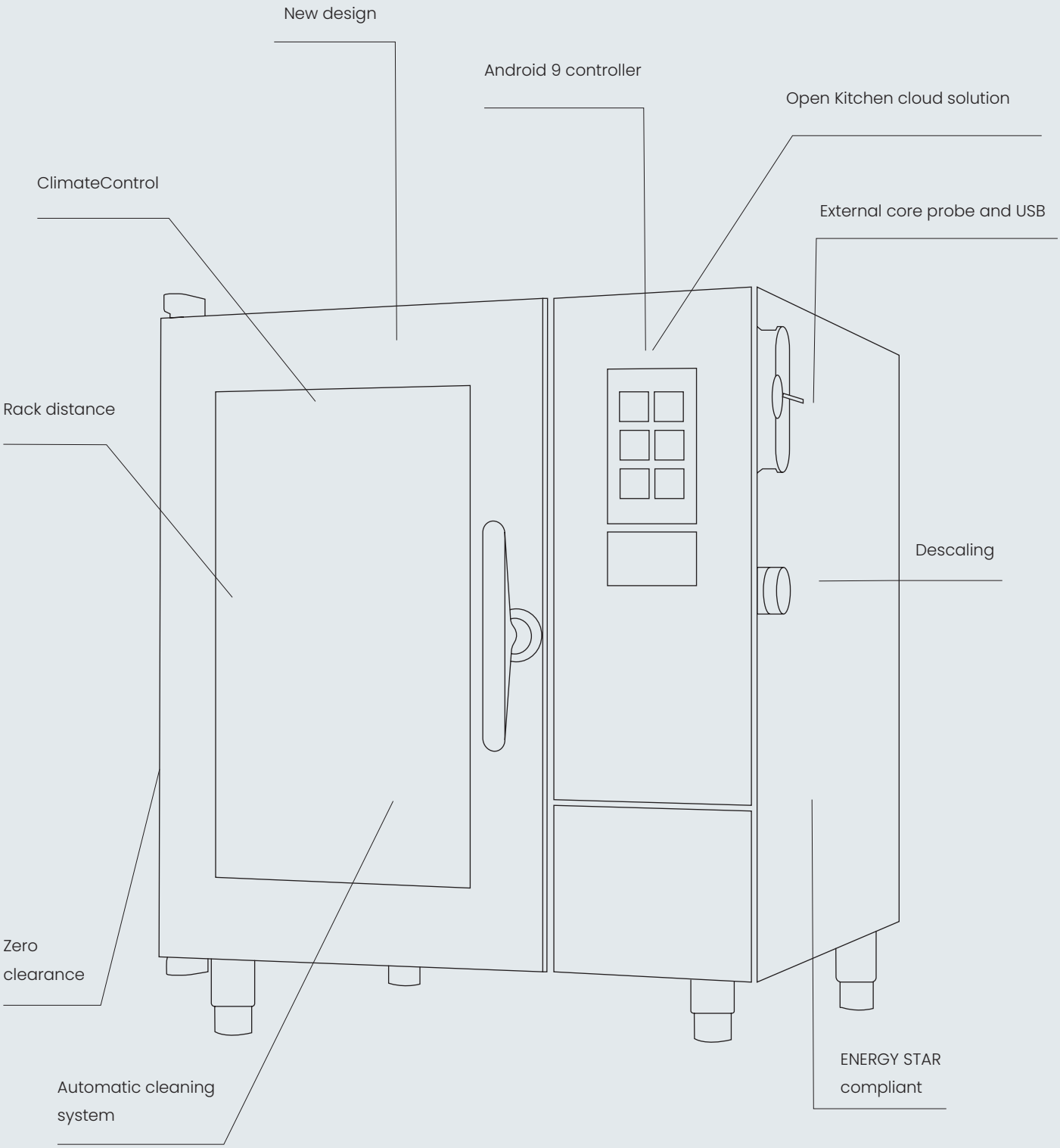
REVISION 05/2025

Spec sheet

# Invoq | Hybrid 10-2/1 GN

Model 102BE: injection and boiler steam electric oven
Model 102BG: injection and boiler steam gas oven

BLODGETT


New design
Android 9 controller
Open Kitchen cloud solution
ClimateControl
External core probe and USB
Rack distance
Descaling
Zero
clearance
Automatic cleaning
system
ENERGY STAR
compliant

# A whole new oven experience

The Invoq Hybrid is the perfect kitchen appliance, where all the latest technologies have been made simple for you to use.
The 10-2/1 GN model offers a combination of an energy-efficient boiler with an injection steam system. Together with smart sensors and integrated drain and inlet systems the oven delivers fast, efficient and safe high-density steam saturation – perfect for intensive steaming production. This creates an ideal cooking environment for cooking different products at the same time.
The steam production and the automated cleaning system are controlled to utilize a minimum amount of energy and water without ever compromising quality results.

CAPACITY

- Full size sheet pans, 2/1 GN or 1/1 GN
- 2-piece rack with 2.75" (70 mm) runners
- 10 trays full size sheet pans, or 20 trays 1/1 GN
- 19.8 lbs maximum food load per tray
- 198.4 lbs maximum food load per oven

## Intelligence at the tip of your finger...

### ClimateControl

ClimateControl ensures best-in-class performance, controlling the air, heat and humidity levels.
It optimizes processes and even shortens cooking times. The result is consistent uniformity and predictably high quality.

### MenuPlanner

MenuPlanner allows you to cook many different items, unsupervised at the same time, using a simple drag and drop interface. Both experienced and inexperienced users will appreciate the automatic notifications that ensure efficient, precise and on-time consistency.

### CareCycle

Select between seven different cycles from Light to Intense, Turbo or Eco. The Invoq oven guides you through the process and suggests the optimal cleaning program and required amount of cleaning tablets for the desired cycle. This ensures that the ratio of detergent to water is always correct and you avoid overconsumption.

### SmartChef

SmartChef helps you learn from the oven to develop your signature style. You select type of food, cooking method and temperature, and SmartChef will automatically guide you to a great result. Afterwards, you can save and, if necessary, edit the formula.

# Electricity

## Dimensions & weight

| | |
|---|---|
| Dimensions excl. handle (HxWxD) [mm/ inches] | 1081 x 1077 x 946/ 42.6 x 42.4 x 37.2 |
| Dimensions incl. handle (HxWxD) [mm/ inches] | 1081 x 1077 x 1028/ 42.6 x 42.4 x 40.5 |
| Dimensions incl. handle and stand (HxWxD) [mm/inches] | 1781 x 1077 x 1028/ 70.1 x 42.4 x 40.5 |
| Shipping dimensions (HxWxD) [mm/inches] | 1210 x 1100 x 1250/ 47.6 x 43.3 x 49.2 |
| Net weight [lbs] | 417 |
| Shipping weight [lbs] | 461 |
| Clearance (left, back, right) [mm/inches] | 0 x 0 x 40/ 0 x 0 x 1.6 |
| Maximum working height [mm/inches] basic stand | 1585/ 62.4 |

## Power requirements

| | |
|---|---|
| Power consumption [kW] | 31.3 |
| Convection output [kW] | 30 |
| Steam output [kW] | 18 |
| Grid supply frequency [Hz] | 60 |
| **Voltage 208 V 3Ph AC** | |
| Amperage [A] | 89 |
| RCD model | B/F |
| **Voltage 240 V 3Ph AC** | |
| Amperage [A] | 78 |
| RCD model | B/F |
| **Voltage 440 V 3Ph AC** | |
| Amperage [A] | 46 |
| RCD model | B/F |
| **Voltage 480 V 3Ph AC** | |
| Amperage [A] | 42 |
| RCD model | B/F |

## Water requirements

| | |
|---|---|
| Water connection [inches (GHT)] | 3/4 |
| Drain [inches] | Ø2 |
| Water pressure (min-max) [psi] | 15-87 |
| Water flow [gpm] | 1.5 |

## Heat emission

| | |
|---|---|
| Latent heat load [kW] | 3.15 |
| Sensible heat output [kW] | 2.21 |

## Noise emission

| | |
|---|---|
| Noise level without hood system [dB(A)] | <65 |
| Noise level with hood system [dB(A)] | <65 |

## IP classification

IPX5

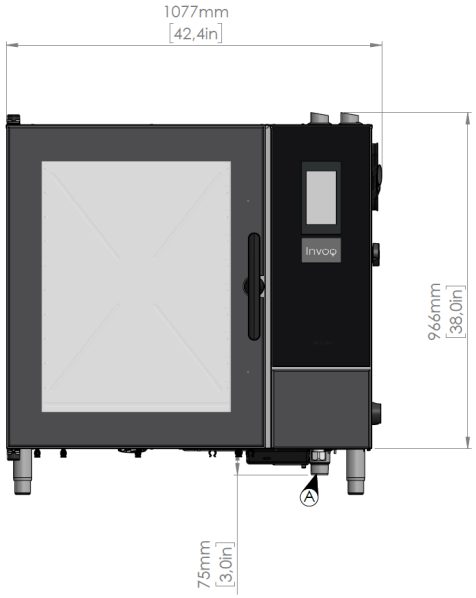
| | |
|---|---|
| IP class | IPX5 |

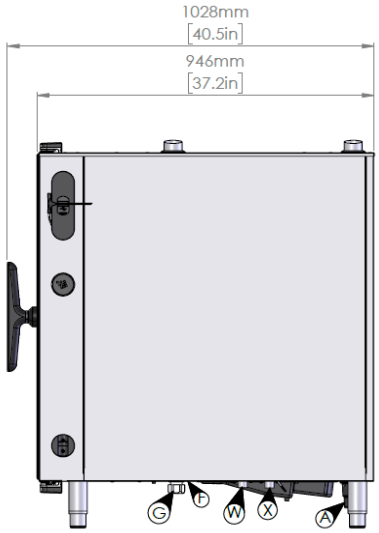
## Data

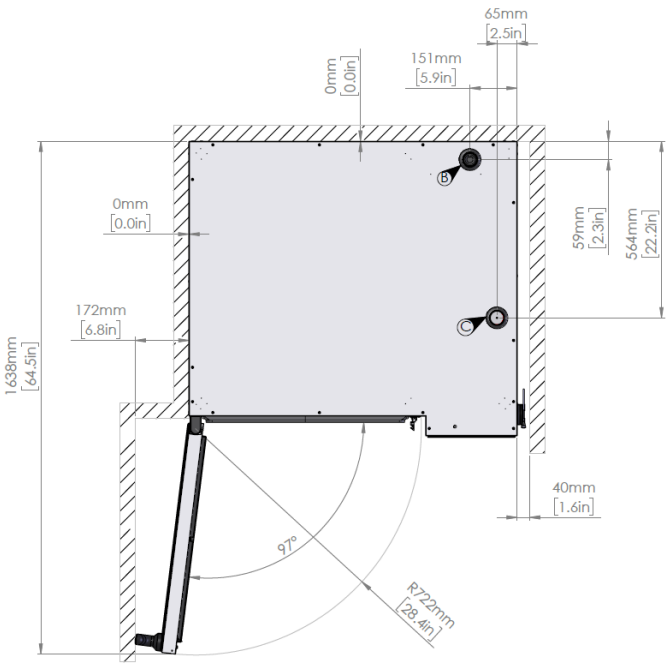
| | |
|---|---|
| Wi-Fi module | IEEE 802.11 b/g/n (2.4 GHz) |
| LAN | RJ45 |

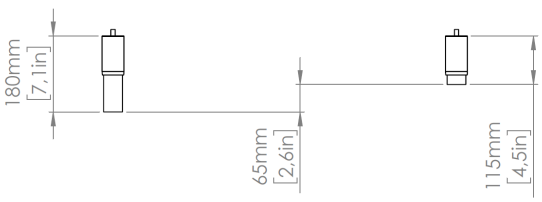
This appliance uses a variable frequency drive, which can be known to product high frequency electrical noise. In some cases units must be hard wired. This avoids false positives on ground fault devices susceptible to errors from electrical noise. All installations must comply with local and national codes.
Further technical information can be found in the installation manual.

| | |
|---|---|
| A | Drain outlet |
| B | Air outlet (drain) |
| C | Air intake |
| F | Ethernet connection |
| G | Electrical connection |
| W | Water inlet (filtered or unfiltered water) |
| X | Water inlet |




Notes to drawings:
400 mm / 15.75 inches spacing on right side of oven recommended for service access.
Foot shown in standard and extended lengths.

# Gas

## Dimensions & weight

| | |
|---|---|
| Dimensions excl. handle (HxWxD) [mm/ inches] | 1081 x 1077 x 946/ 42.6 x 42.4 x 37.2 |
| Dimensions incl. handle (HxWxD) [mm/ inches] | 1081 x 1077 x 1028/ 42.6 x 42.4 x 40.5 |
| Dimensions incl. handle and stand (HxWxD) [mm/inches] | 1781 x 1077 x 1028/ 70.1 x 42.4 x 40.5 |
| Shipping dimensions (HxWxD) [mm/inches] | 1210 x 1100 x 1250/ 47.6 x 43.3 x 49.2 |
| Net weight [lbs] | 458 |
| Shipping weight [lbs] | 513 |
| Clearance (left, back, right) [mm/inches] | 0 x 0 x 40/ 0 x 0 x 1.6 |
| Maximum working height [mm/inches] basic stand | 1585/ 62.4 |

## Power requirements

| | |
|---|---|
| Gas connection load [kW] | 44 |
| Gas connection load [BTU/H] | 150100 |
| Convection thermal load [kW] | 24 |
| Convection thermal load [BTU/H] | 81900 |
| Steam thermal load [kW] | 20 |
| Steam thermal load [BTU/H] | 68200 |
| Grid supply frequency [Hz] | 60 |
| **Voltage 115 V 1PhN AC** | |
| Power consumption [kW] | 1 |
| Pre-fuse [A] | 10 |
| RCD model | B/F |
| Available gas types [natural/LPG] | G20 / G31 |
| Gas connection size [inches] | 3/4 |

## Water requirements

| | |
|---|---|
| Water connection [inches (GHT)] | 3/4 |
| Drain [inches] | Ø2 |
| Water pressure (min-max) [psi] | 15-87 |
| Water flow [gpm] | 1.5 |

## Heat emission

| | |
|---|---|
| Latent heat load [kW] | |
| Sensible heat output [kW] | |

## Noise emission

| | |
|---|---|
| Noise level without hood system [dB(A)] | <65 |

## IP classification

IPX5

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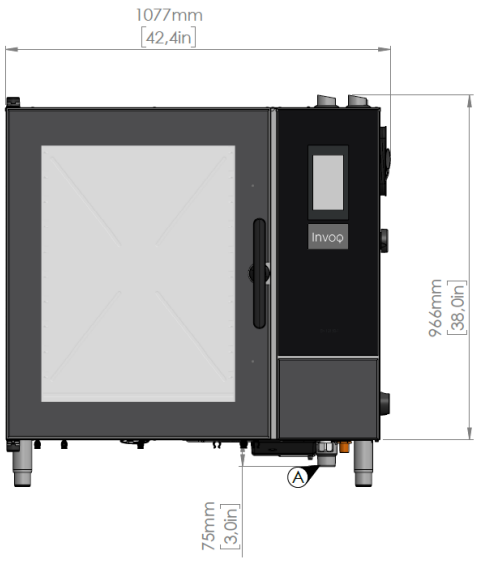
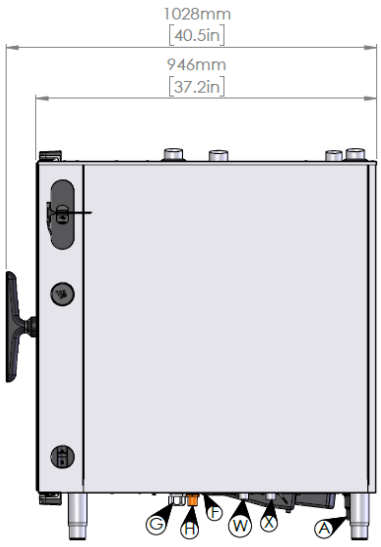
## Data

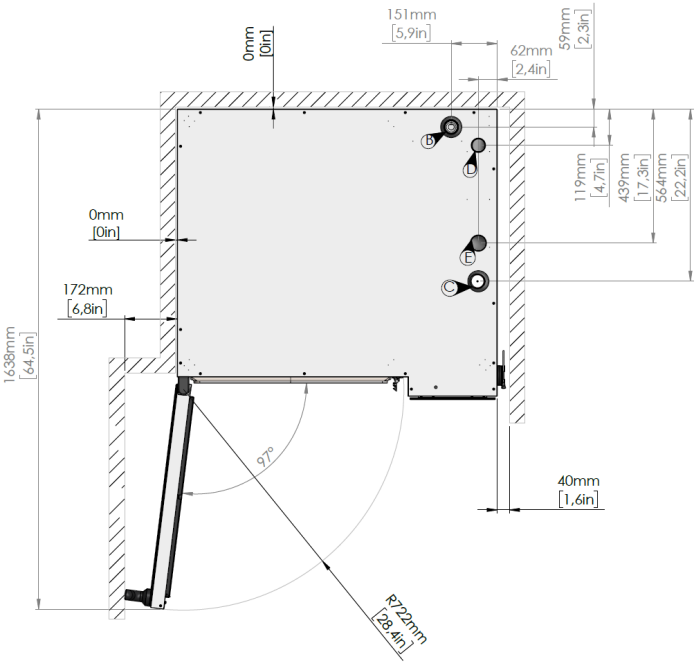
| | |
|---|---|
| Wi-Fi module | IEEE 802.11 b/g/n (2.4 GHz) |
| LAN | RJ45 |

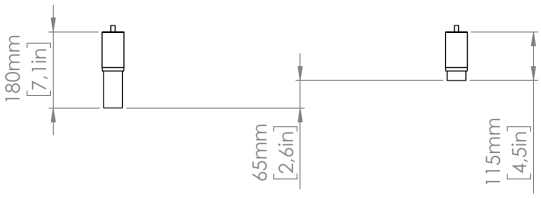
Further technical information can be found in the installation manual.

| | |
|---|---|
| A | Drain outlet |
| B | Air outlet (drain) |
| C | Air intake |
| D | Gas-generator outlet |
| E | Gas heat exchanger outlet |
| F | Ethernet connection |
| H | Gas connection |
| W | Water inlet (filtered or unfiltered water) |
| X | Water inlet |




Notes to drawings:
400 mm / 15.75 inches spacing on right side of oven recommended for service access.
Foot shown in standard and extended lengths.

# Features

## Intelligence

| | |
|---|---|
| ClimateControl | Optimal cooking environment through control of air, heat, pressure and humidity levels.<br>Reversible fan adjustable with 9 steps (20-100%).<br>Humidity correction accurate to 1/10 of a second. |
| CareCycle | Fully automatic, recirculating tablet-based cleaning system.<br>System guidance to appropriate cleaning program and required amount of detergent.<br>Organizer to schedule a carefree overnight clean.<br>Automatic rinse after interrupted cleaning cycle. |
| MenuPlanner | Up to 10 integrated timers for notifications.<br>Software to input and group recipes with drag and drop functionality.<br>Automatic alert to request staggering of loading when grouping up to three specific recipes. |
| CookTimeCorrection (CTC) | Intelligent sensors detecting unexpected changes in temperature and compensating accordingly. |
| SmartChef | Intelligent cooking automation selecting the optimal cooking settings. |
| Humidity control, CombiSense | Percentage-based automatic humidity system for high-temperature cooking maintaining natural moisture, flavor and color of the product.<br>Sensors supervise and control the Maillard reaction for accurate results. |
| Humidity control, CombiSpeed | Level-controlled humidity injection for improving low-temperature cooking optimizing tenderization and yield of larger products.<br>10 different humidity levels. |
| QSR | QSR, Quick Select Recipes, is a tailored smart user interface allowing recipes as favorites on the home screen.<br>9 thumbnail recipes per page - up to 9 pages for a total of 81 recipes.<br>Option of locked down user interface to prevent manual operation. |
| Connectivity, Open Kitchen | Cloud solution for menu management, recipe distribution, preventive maintenance, real-time overview of fleet, food safety documentation and consumption data overview. |
| Power failure | Automatic restart after power failure allowed up to 30 minutes to ensure finalization of running programs.<br>Automatic rinse after interrupted cleaning process for safe cooking.<br>User notification of failure occurred and documents via HACCP. |

## Operation

| | |
|---|---|
| Convection, temperature range | 30-300°C / 85°-572°F<br>300°C / 572°F possible for 15 minutes, then reducing to 250°C / 480°F for continued run in manual mode. |
| Steam, temperature range | 30-130°C / 85°-265°F<br>HybridSteam combining steam generator and injection for rapid and pure steam for optimal performance even at low temperatures below 100°C / 212°F. |
| CombiSense, temperature range | 30-250°C / 85°-480°F<br>Accurate automatic humidity adjustment. |
| CombiSpeed, temperature range | 30-250°C / 85-480°F<br>CombiSpeed: Power steam adjustable in 10 levels for reduced cooking time and tenderizing products. |
| Cool down | Rapid cool down function with possibility for doing it with the door open or by use of water. |
| Proofing | Humidity regulated proofing function for optimum proofing of baked products |

## Operation

| | |
|---|---|
| InjectionSteam | In steaming mode, steam is generated by injecting water directly on to the heating elements and circulating it with the fan creating fast and efficient steam. |
| HybridSteam | In steaming mode, injection steam is combined with energy-efficient steam from the boiler achieving a high-density steam saturation for intensive steaming productions improving functions such as CombiSpeed for faster cooking and Proving (Proofing) for low temperatures. |
| Steam on demand | Push and hold in manual mode or push and select between 1-30 seconds. |
| Steam on demand in recipes | Programmable steam on demand between 1-30 seconds. Pause can be added between steps for optimal crust. |
| Recipes | The oven can hold 1,500 recipes.<br>Each recipe can hold up to 15 different steps.<br>A set of preset recipes are installed on the oven from factory.<br>Recipes can be grouped, e.g. bakery products, Italian cuisine.<br>Choose from icons or photos, available from a preinstalled library, or upload own images.<br>Simple upload or transfer between Invoq ovens via USB or the cloud solution. |
| Delta-T | Cooking method based on the product's core temperature for gentle preparation tenderizing meat and reducing shrinkage. |
| Cook & Hold | Cooking method using Delta-T as cooking mode until just before the desired temperature is reached after which the temperature is maintained, while automatic humidity control ensures the optimal conditions with a high moisture level and minimum shrinkage. |
| Temperature probe | External multipoint core temperature probe with accurate sensors. Always at ambient temperature. for easy use. Less exposed to wear and tear. |
| Temperature probe | External multipoint core temperature probe with accurate sensors. Always at ambient temperature. for easy use. Less exposed to wear and tear. |

## Safety

| | |
|---|---|
| Fan wheel brake | Rapid fan stop. |
| Overheat protection | Overheating protection for convection heat and steam generator. |
| Contact temperature | Maximum contact temperature of oven door 70°C / 158°F. |
| 3-pane glass door | Swiveling glass panes with built-in ventilation and energy-optimized coating. |
| Tablet cleaner and descaler | Tablet-based environmentally conscious cleaner and descaling chemicals for improved work safety. |
| HACCP | HACCP files are automatically stored for 60 days and can be downloaded in PDF format to ensure food safety documentation. Stored on the oven when not connected.<br>HACCP data includes production time, production duration, preparation temperature and core temperature. |
| Maximum rack height | Maximum working height of 1.6 m / 63 inches. |
| Display lock | Ensuring no interruption with operation when cleaning the surface. |
| IP protection | Protection class IPX5 protecting against water jets from all directions. |
| Door handle | Two-step safety handle as standard. |
| Cavity | 304/DIN 1.4301 steel with seamless welding and rounded corners for optimal airflow and cleaning. |

## Network

| | |
|---|---|
| USB | Integrated USB interface for software, recipe and HACCP handling. |
| LAN | Ethernet interface for wired connectivity to Open Kitchen. |
| Wi-Fi | WLAN upgrade for wireless connectivity to Open Kitchen. |
| Connectivity | Open Kitchen cloud-based system enabling management of oven fleet and general facility management. |

## Care

| | |
|---|---|
| CareCycle | Fully automatic, recirculating tablet-based cleaning system with 7 cycles from Light to Intense, Turbo or Eco. Pressure-dependent system. Turbo cleaning in just 15 minutes.<br>System guidance to appropriate cleaning program and required amount of detergent.<br>Organizer to schedule a carefree overnight clean.<br>Automatic rinse after interrupted cleaning cycle ensuring no chemical residue left in the chamber. |
| CareCycle Clean tablets | Phosphate-free formula of the detergent for an eco-conscious choice |
| CareCycle Descale tablets | Descaling of boiler unit and/or cavity for proper cleaning of hard water deposits. |
| Water filter | For specific guidelines, follow Blodgett Combi's water treatment documentation. |
| 3-pane glass door | Swiveling glass panes for easy cleaning. |
| Hand shower | Hand shower can be mounted on the side, with separate closing mechanism.<br>The external hand shower is designed with focus on ergonomics and work environment. |
| External | Easy external clean due to stainless steel and glass surfaces and IPX5 protection. |
| Connectivity | Monitoring and consumption overview via the Open Kitchen cloud solution. |

## Comfort

| | |
|---|---|
| Time format | Adjustable in 24-hour format or am/pm. |
| Timer start | Customizable automatic timer starts. Allowing the oven to start and/or preheat unsupervised. |
| Timer modes | HH:MM - MM:SS - continuous time |
| Display | Digital temperature display adjustable in °C or °F, display of target and actual values. |
| Fan speed | 1 or 2 fan wheels. Reversible fan ensuring uniform results.<br>Optimum distribution of air and steam in oven chamber.<br>Adjustable fan with 9 steps (20-100%); low fan speed - ideal for light/delicate products<br>The fan can be set manually in convection, steaming and combi mode. In all other modes, the fan function is set automatically. |
| Lighting | LED lighting from the door with high illumination of cooking chamber. Energy saving and long life. |
| Touch display | Fast reacting and intuitive touch display for smooth and easy operation. |
| User interface | Capacitive 7" TFT color touch screen with super wide view for optimal viewing angles. Simple and intuitive operation by self explanatory symbols and guidance eases the operation like a smartphone, operated by Android 9. Compatible with Middleby UI for multi devices with same control. |
| Languages | 27 languages preset for operation and trouble shooting. |
| Cooking methods | 7 operating modes and/or 5 cooking modes. |
| Supervision access | View or change the operating mode. |
| Customization | Customize the home screen to allow easier access to favorites, cleaning and MenuPlanner removing the risk of operator errors.<br>Customize notes with alarms to guide staff. Incorporate guidelines to recipes for optimal usage and elimination of errors. |

## Installation, maintenance & environment

| | |
|---|---|
| Start widget | Correct and stress-free installation incl. location (sea level) customization. |
| Service widget | Correct and easy maintenance incl service diagnosis and self-test functionality. |
| Fitting | Left- or right-hinged door for optimal ergonomics and kitchen design. |
| Service access | Easy service access from one side of the oven only. 400 mm / 15.75 inches spacing on right side of oven recommended for service access. |
| Water filtration | Water treatment is recommended for optimal operation. User notification by oven for replacement. |
| Solenoid valves | This appliance has backflow prevention on the solenoid valves. |
| Drain | The drain piping must consist of temperature resistant material, greater than 160°F, and be of adequate diameter not to cause flow restriction. Improper materials may deform and cause restrictions, thus affecting performance. Appliance is to be installed with backflow protection in accordance with federal, state or local codes. |
| Connectivity | Remote diagnosis and updates with Open Kitchen. |
| Warranty | Standard warranty or extended according to purchase agreement with distributor. |
| Maintenance | Regular maintenance is recommended according to the manufacturer's guideline by trained service partners. |
| Energy efficiency | Tested in accordance with ENERGY STAR. |
| Ambient temperature | Minimum 5°C (41°F) - Maximum 50°C (120°F) ambient operation temperature. |

## Options

| | Item number |
|---|---|
| Right-hinged door 10-2/1 GN (upon request) | - |
| Fat Separation System 2/1 GN (factory-built) | 104841 |
| Condensation hood 2/1 GN (electric oven) | 108111 |
| Condensation hood Stackit 2/1 GN (electric oven) | 108115 |
| Stackit 2/1 GN (electric oven) | 107803 |
| Stackit 2/1 GN (gas oven) | 107804 |
| Marine version 20 - 1/1 & 2/1 GN | 108117 |
| Special voltage (upon request) | - |
| Wi-Fi module | 108137 |
| Open Kitchen cloud solution | |

## Stands

| |
|---|
| Basic stand 2/1 GN |
| Stand for table & Stackit 2/1 GN |
| **Options for stand (add-on):** |
| Racks 2/1 GN (up to two) |
| Castors (set of four incl. lock mechanism) |
| Exterior cabinet & doors 2/1 GN |

## Racks

| | Item number |
|---|---|
| 10-2/1 GN 70mm 10 trays (20 x 1/1 GN) U-shaped | 107885 |
| 10-2/1 GN 85mm 8 trays (16 x 1/1 GN) U-shaped | 107884 |

## Accessories

| | Item number |
|---|---|
| Heat shield 10-2/1 GN | 108123 |
| USB key | 108128 |
| IEMS energy management system | 108119 |

## CareCycle

| | Item number |
|---|---|
| CareCycle Clean tablets | 106032 |
| CareCycle Descale tablets | 106033 |

This appliance is intended for use in professional and commercial kitchens.
The company reserves the right to make substitutions of components without prior notice.

# GET IN TOUCH.

As your oven specialist, we always do our utmost to help our customers. Worldwide.

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