Refrigerator





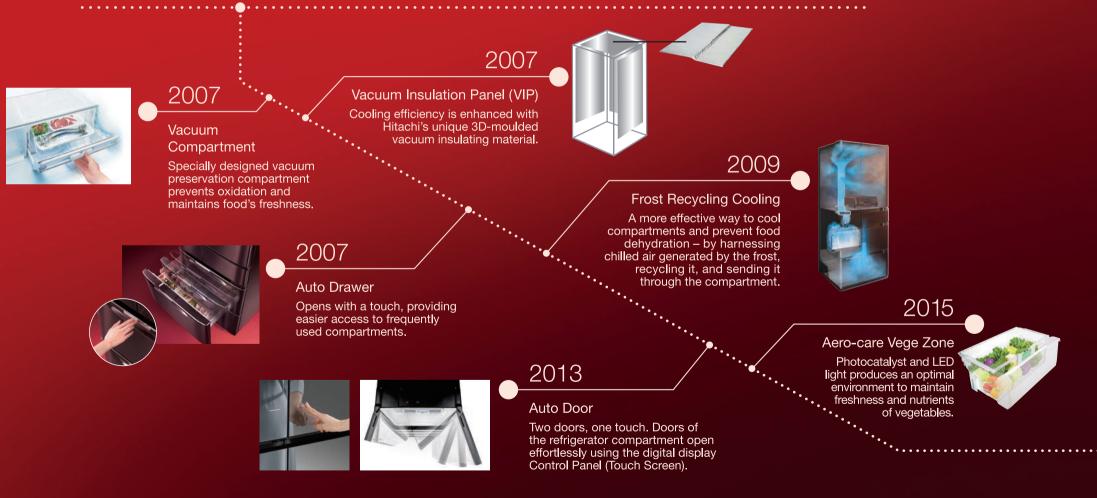
The Hitachi Story

Japan Made



The Hitachi Story

Steeped in a rich history of quality electronics, Hitachi's eco-friendly refrigerator is Japanese design and technology at its finest. Its innovative Platinum Catalyst in both the Vacuum Compartment and Aero-care Vege Compartment, breaks down ethylene and converts it to carbon dioxide which creates an optimal environment that sustains freshness and nutrients in vegetables. Paired with top-of-the-line Vacuum Insulation Panels and an advanced Frost Recycling Cooling with Hybrid Defrost, chilled air is evenly and efficiently distributed while preventing food dehydration. And with a digital display Control Panel (Touch Screen) for the Auto Door, we've opened up another fresh avenue to intelligent homes. Hitachi Social Innovation, it's our legacy for generations to come.





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··• Freshness Redefined

Aero-care Vege Compartment with Platinum Catalyst

In the Aero-care Vege Compartment, Platinum Power Catalyst produces an optimal environment of increased carbon dioxide that maintains the freshness and nutrients of vegetables.

Vacuum Compartment with Platinum Catalyst

Approx 0.8atm of Vacuum Preservation with unique Platinum Catalyst keep chilled meat, fish, dairy products fresh and nutritious.





...... Energy Saving

Original Hitachi Energy-Saving Technologies

Multi-valve control, frost recycling cooling and other technologies help reduce electricity consumption.

Designed to Perfection

Large Capacity

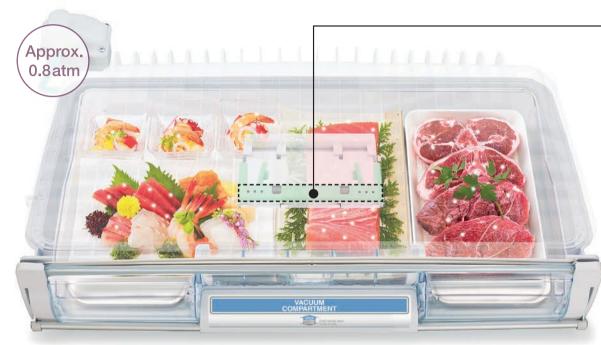
The largest refrigerator in the industry, at 730L. All Hitachi refrigerators have been certified CFC-Free since September 2015.

VACUUM COMPARTMENT

For meat, fish, dairy and processed foods

Hitachi Original Vacuum Preservation*1

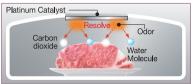
Introducing Vacuum Preservation technology with Platinum Power Catalyst to keep food fresh for longer.



*1 Vacuum means the space where the pressure is lower than the atmospheric pressure. The pressure in the Vacuum Compartment is about 0.8atm, which is lower than the atmosphere pressure, so Hitachi calls such a state as vacuum.

Freshness Preservation with new Platinum Catalyst

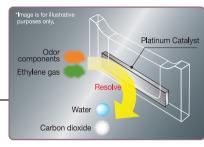
Odor components from meat and fish are broken down by the Platinum Catalyst to generate a greater amount of carbon dioxide than the conventional photocatalyst. The carbon dioxide dissolves in water on the surface of food items to make the surface weakly acidic, which suppresses enzyme strength to minimize loss of freshness.







Carbon dioxide dissolves in the water on the surface of food items to make the surface weakly acidic, which suppresses the action of enzymes.



Platinum Catalyst

Odor components that come into contact with the catalyst are broken down into carbon dioxide and water.

With Japanese innovation at its finest, Hitachi's uniquely designed Vacuum Preservation can achieve approximately 0.8atm capabilities through the use of a vacuum pump to extract air and reduce oxygen, suppressing oxidation, thus ensuring freshness of food while retaining its nutrients.

Furthermore, the airtight structure of the compartment confines moisture inside, thus helping to prevent dehydration of stored food.



Conventional Compartment Oxidation and loss of nutrients occur easily



Vacuum Compartment Reduction of oxygen in the surrounding air retains nutrients and preserves freshness

2 Temperature Zones

Selecting the Vacuum Sub Zero mode for items such as meat, fish and processed food, and the Vacuum Chilled mode setting for items such as vegetables and tofu let you store food without freezing them. This helps to prevent deterioration of flavor and texture due to freezing.

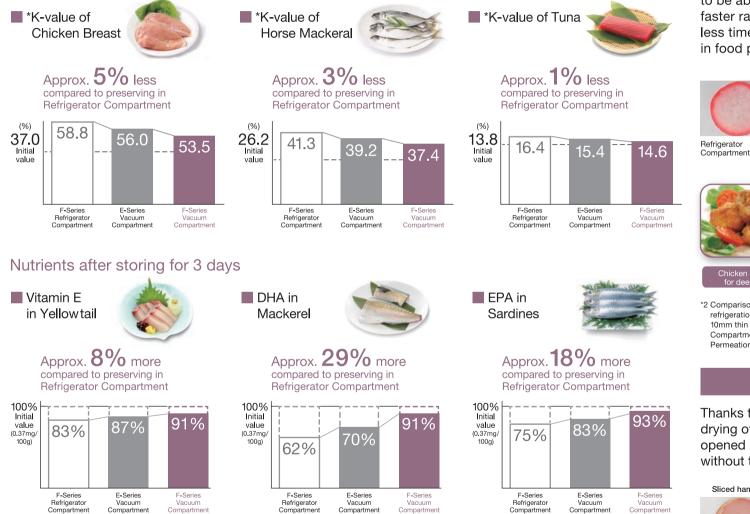


Food in Vacuum Compartment

For storage of meat and fish in the Vacuum Compartment

Freshness after storing for 3 days

* K-value is an indication of freshness. The lower the value, the fresher the item. In general, a value of 60% or higher indicates an item is not suitable for consumption.



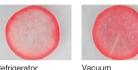
Comparison of storage in the new R-X7300F (equivalent to R-F7300XS) Vacuum Compartment (Vacuum Sub Zero mode) and the Vacuum Compartment (Vacuum Sub Zero mode) of the previous year's R-G6700X. Outside temperature of 20°C, with items wrapped in polyvinyl chloride bags, and with no door opening/closing. Water and gases can permeate polyvinyl chloride bags so whether items were wrapped or not did not influence the effect of Vacuum Preservation or Platinum Preservation. The effect differs depending on factors such as the type and freshness of food. The effect does not extend best-before and expiration dates, and does not guarantee the indicated shelf life.

Quick Seasoning

Regular seasoning

The vacuum compartment removes air from stored food, allowing the seasoning to be absorbed at a faster rate^{*2} so that less time is required in food preparation. Seasoning Liquid Seasoning Liquid Ingredients

> Seasoning in vacuum state During this process, seasoning liquid permeates food faster due to removal of air.



Compartment

Radish with 10mm diameter, soaked for 3 hours. Red dye is used to show the permeation rate of the seasoning liquid.



*2 Comparison of time taken for the salt concentration in the radish to reach 1.3% in the refrigeration compartment (atmospheric pressure) and Vacuum Compartment when immersing 10mm thin slices of radish in 10% salt water. Refrigeration compartment: 240 minutes; Vacuum Compartment: 108 minutes. Tested using R-G6700D (functions equivalent to R-E6800X). Permeation rates may differ depending on food or seasoning used.

Reduces dehydration in food

Thanks to the Vacuum Compartment's sealed construction, drying of stored items is reduced. Now you can store opened items and dishes you want to store for a while without the need for troublesome wrapping.

Sliced ham (after storing for 24 hours)

Refrigerator

Refrigerator
compartmentVacuum
CompartmentEdges are dried
and curled up.Drying has
been reduced

Refrigerator compartment Dried and dark vellow

Vacuum Compartment Still moist up to the edges.

Sliced cheese (after storing for 24 hours)

AERO-CARE VEGE COMPARTMENT

For vegetables and fruits

The Power of Platinum

Uniquely designed to maintain freshness and nutrients in vegetables, the Aero-care Vege Compartment puts food under the power of a Platinum Catalyst, producing increased carbon dioxide to control respiration of vegetables and limiting the consumption of nutrients in the environment to prevent loss of freshness.

In addition, the improved airtight seal of the compartment increases humidity, with the Humidity Control unit also releasing excess moisture, vegetables remain in optimal condition, further ensuring they retain their freshness and nutrients.

Effect of Platinum Catalyst in the Aero-care Vege and Vacuum Compartments based on joint research with Hokkaido University

Highly efficient even at low temperatures, the Platinum Catalyst developed by Hokkaido University breaks down ethylene and odor components inside the refrigerator into carbon dioxide. By maintaining a higher concentration of carbon dioxide than that in the air, Platinum preservation suppresses respiration of vegetables, and the action of enzymes on the surface of meat and fish to retain freshness and nutrients.



Atsushi Fukuoka, Catalysis Research Center, Hokkaido University

Perfect Moisture Storage in Vegetable Compartment



Improved moisture cover for better sealing

Carbon dioxide + Perfect Humidity*1

Close the door and the moisture cover acts as a lid over the entire vegetable compartment for improved sealing. Carbon dioxide concentration increases while moisture is kept in, helping to prevent drying. Excess moisture is released outside the case by the moisture unit to maintain the optimum amount of moisture and prevent condensation.

Original X Series features

Light, easy opening and putting in/taking out of items with the Auto Drawer & Full Open Design

Auto Drawer Even when it's full of items and heavy, one touch is all it takes to slide out the Auto Drawer.



Able to open fully You can see all the way to the back, so you won't overlook items and forget about them so often. And even in limited space, you can easily slide open the drawer from the side.

Hitachi Original Features



Bright and Easy-to-See with LED Lighting

Tall storage space

For storing 2L PET bottles

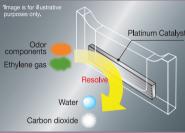
(up to 308mm tall), opened

seasonings and other items.



*1 In the R-X7300F (equivalent to R-F7300XS) Aero-care Vege Compartment, with approx. 1.4kg of unwrapped vegetables stored in the upper case, 2.1kg in the lower case and 1.4kg in the vertical storage space, without opening/closing the door for 7 days, the average humidity was 92.4 to 99.1% in the upper case, 94.4 to 99.5% in the lower case, and 85.3 to 94.3% in the vertical storage space. Humidity may differ depending on factors such as the amount, type and freshness of vegetables stored, and the operating conditions of the refrigerator.





5

Optimal storage of vegetables in Aero-care Vege Compartment

Sustain freshness and nutrients with Platinum Catalyst (after storing for 7 days)

Japanese Mustard Spinach

Orange [Sliced]



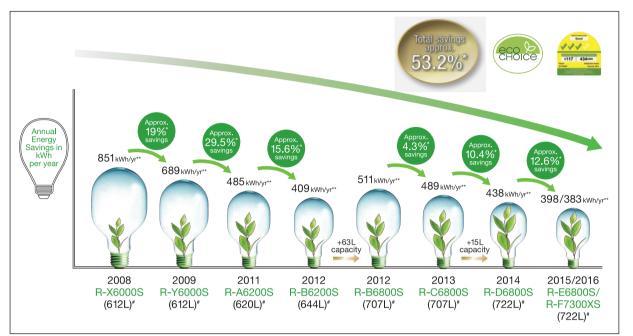
*2 Comparison of the Aero-care Vege Compartment in the new R-X7300F (equivalent to R-F7300XS) and the Moist Vegetable Compartment (without Platinum Preservation) in the R-G6700D from 2 years ago. The effect does not increase nutrients, etc., compared to initial values.

Tests were conducted in Japan, using Japanese domestic model. Storable amount of vegetables stored without wrapping in the Aero-care Vege Compartment of the R-F7300XS for 7 days without opening/closing the door, and with an outside temperature of 20°C and humidity of 70%. Comparison made with the same amount of vegetables stored in the R-G6700D's Moist Vegetable Compartment under the same conditions. The effect may differ depending on factors such as the amount, type and freshness of vegetables. Tested by Hitachi.

ENERGY SAVING

Annual Energy Consumption Chart

A range of technologies such as frost recycling cooling and vacuum insulation panels, new technologies such as multi-valve control have been added to further ensure energy-saving performance.



Comparison of annual energy consumption between the new product R-F7300XS and the previous models.

Hitachi Original Flexible Vacuum **Insulation Panel (VIP)**





Large capacity and energy saving

Using the conventional insulation material of urethane foam together with highly efficient vacuum insulation panels enables both large capacity and energy-saving performance.

*The location, shape and number of vacuum insulation panels differs depending on the model.

High-Efficiency Inverter Compressor



Moisture

Cooling

fan

Condense

Compact but high powered

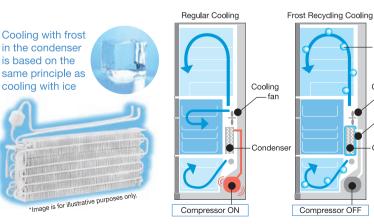
The high-precision, high-durability inverter compressor finely adjusts cooling power from high to low. It is capable of providing exceptionally powerful cooling by generating a large volume of chilled air, while also providing efficient low cooling.

Depending on conditions inside and outside the refrigerator, it provides optimum cooling power at all times.

Hitachi Original Frost Recycling Cooling Technology with Hybrid Defrost

Effective use of frost for cooling

When the compressor isn't operating, frost formed in the condenser when it was operating is used to cool the refrigerator and vegetable compartments. Frost results in energy consumption, but this is reduced by defrosting with heaters. Cooling with frost in the condenser is based on the same principle as



In conventional cooling systems, frost formed on the evaporator simply melts and is discarded. In Frost Recycling Cooling with Hybrid Defrost^{*1}, chilled air generated by frost is recycled by being sent to the Refrigerator and Vegetable compartments to cool them even when the compressor is not running. Through this system, energy consumption is reduced.

With the Hitachi Original Frost Recycling Cooling System with Hybrid Defrost, two heaters are used to defrost, thus speeding up the defrosting process.

*1 Hybrid Defrost is applicable to R-F7300XS,



cooling with ice.

HFC-Free Polyurethane Insulation / HFC-Free Refrigerant (R600a)

Environment-friendly HFC-Free features

Taking the environment into consideration, hard urethane insulation made using HFC-Free insulation foaming gas (cyclopentane) as a foaming agent is used for insulating parts that are not vacuum insulated. The HFC-Free refrigerant R600a, which has minimal effects on global warming compared to HFC-alternative R134a, is used.

Convenient Eco Intelligent Control

Cuts power consumption by about 10-12% compared to that during regular operation. (Room temperature of 15°C - 30°C)*2



Save Mode

Touch the Energy Saving button to start the Save Mode with the following four functions:



- LED Lighting (inside the refrigerator)
- Lighting dims when the door has been left open for 30 seconds, to prompt the user to quickly shut the door.
- Temperature (in each compartment) Slowly cools the compartment without affecting food preservation.
- Door Alarm
- The alarm sounds when door has been left open for 30 seconds. In normal mode, alarm only sounds when door has been open for 1 minute.
- Controlled Compressor Operation Lowers the rotation speed of the compressor.

Indications for smart use



This lights when operation is comparatively stable. It goes out when there is a heavy load on the refrigerator such as during rapid freezing.



*2 With the R-X7300F. Differs from the 2006 JIS C 9801 measurement standard. Comparison made with all temperature settings at "Medium", and installation in the minimum required space. With a room temperature of 30°C, during regular operation: 1.209kWh/day, during Power Save mode operation: 1.057 to 1.082kWh/day. With a room temperature of 15°C, during regular operation: 0.577kWh/day, during Power Save mode operation: 0.5706 to 0.515kWh/day. The power saving effect differs depending on conditions of use. There is no power saving effect when the temperature setting is "Low".

Triple Power Deodorization

In Save Mode, cooling power is lowered so you might

feel that the cooling effect in the refrigerator is weak,

although it is limiting the consumption of energy.

Empowered with a Triple Deodorant Filter that catches and removes odors, as well as inhibits the activity of any bacteria captured.

Combining the properties of Activated Carbon, Zeolite and Manganese Oxide (catalyst), the percentage of odors present is greatly reduced over time.

The deodorization filter has a sterilizing effect.

- Testing organization: Boken Quality Evaluation Institute
- Testing method: Film adhesion method (JISZ2801)
- Name of processing component: Filter
- Sterilization method: Apply oxidation catalyst to filter
- Subject: Bacteria trapped in filter
- Test results: 99% sterilized after 24 hours, achieved using the filter alone. No effect on the environment and food inside the refrigerator.

Odor Components That Can Be Removed

Ammonia

Fish odor







Acetaldehyde Fermentation odors of miso and soya sauce



Shelves and Pockets with adjustable height





Adjustable Tempered Glass Shelves

The heights of 1st and 2nd shelves from the top can be adjusted to match your needs.

* When you set the height of the top shelf to the center portion (three levels)



Pocket with Adjustable Height Height can be adjusted to two levels depending on the size of the food items.







Large pots and tall bottles can be stored by changing the layout of height adjustable shelves.

Hitachi Original features



Easy-to-Open Auto Doors Just touch the control panel with a finger and the door automatically opens. You can also open both doors with a single touch. For details, please refer to P.13.



Movable Egg Case (Only in the R-F7300XS and R-F6800XS)

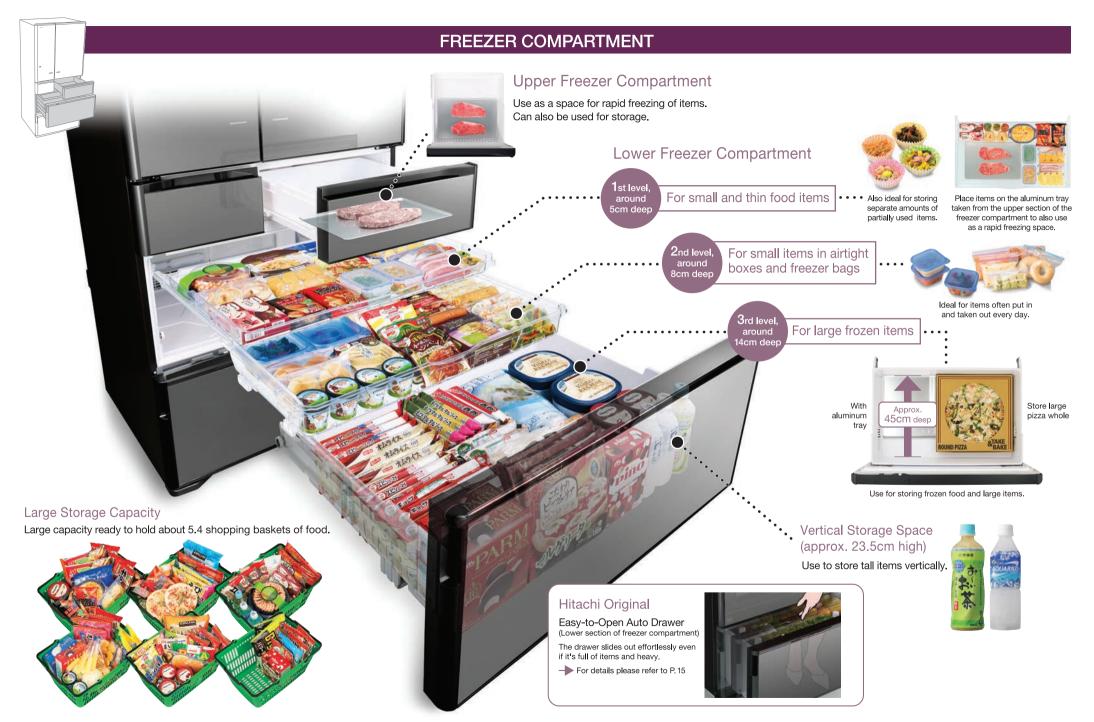
You can place it anywhere you like on the shelves. Also able to arrange all small items at once.



Tempered Glass Shelves Durable and easy to clean tempered glass. (1st – 2nd level from the top)



Quick Cooling When you want to chill food items quickly after a grocery shopping spree.



• The measurements and rated capacities are based on the R-F7300XS using a 22L capacity basket. Total storage capacity of the upper and lower sections of the freezer compartment is approx. 118L. Ice making compartment is not included.

• Ice cream and other items with a high fat content stored in the freezer compartment's upper section or in the thin item case in the lower section may become soft. If this happens, please move the items to the large item case in the freezer compartment's lower section.

Quick Freezing



Maximum ice crystal formation zone

Time

Regular Freezing

Temperature

Quick Freezing

-1°C

-5°C

–18°C

During Quick Freezing, chilled air is sent to the freezer compartment to freeze items at a rapid rate. By placing food on the Aluminum Tray, food chills faster due to quick conductivity of the metal.

Simply press the 'Powerful' button to increase the cool airflow, allowing Quick Freezing to start.

By quickly going past the maximum ice crystal formation

zone where moisture in food items freezes, the arowth

of ice crystals will be inhibited. Damage to food cells is

*Note1: Hot food items can be separately wrapped and placed lying flat on the surface, and fixed to the aluminium tray before freezing. The time taken for the food item to freeze completely will depend on the

food item's temperature and quantity, and the temperature of

surrounding food items may increase. If a 60°C food item that

weights 450g is placed under powerful freezing, the electricity

consumed is around 20% (calculated value) more than during

the approximately 90 minutes of powerful freezing, compared to

cooling the food item to 20°C before powerful freezing. Based on

prevented, reducing the dripping during defrosting.

Automatic Ice-Maker Compartment

Make ice automatically by simply filling up the water supply container of the Ice-Maker Compartment. No plumbing required.

Tank Type Automatic Ice-Maker

You can enjoy clean ice anytime from bottled water that goes through the water filter. No troublesome plumbing is required, as the unit does not need to be connected to a tap. The water pump and pipe are maintenance free.





*2 Recommended to use water with a hardness level below 100mg/L. If you use mineral water, white suspended solids will be mixed in the ice. However, this would not affect the water's drinkability since the minerals are trapped in the ice.



Quick Freeze/

-temperature freezing

Conventional Freezing Visible dripping from meat Drip from meat is under control



Conventional Freezing Cavities are visible Quick Freezing Almost no sign of cavities

*Note 2: Comparison of the state of beef between storing in the freezer for 24 hours and thawing for 2 hours at a room temperature of 20°C. Comparison of the state of bamboo shoot between storing in the freezer for 16 hours, and thawing for 4 hours at a room temperature of 20°C. Based on experiments conducted at Hitachi. The effect will differ depending on the type of food item, freshness level, state of packaging, and the thawing method.

Low Temperature Freezing

Preserves food at a lower temperature than regular freezing method, setting the temperature in the freezer compartment to maximum^{*1}.

*1 Temperature settings of freezer compartment is set to "strong". Compared with the regular freezing method, the energy consumed is 20% higher. Based on experiments conducted by Hitachi.

Comparison of dripping after thawing (beef) Minimal dripping of meat juices

testing conditions done at Hitachi.

after thawing

Comparison of condition after thawing (cross-section of bamboo shoots)

Easy freezing of bamboo shoots that are usually difficult to freeze

Conventional Ice-Making 120 minutes Quick Ice-Making 80 minutes*3

Able to use Mineral Water*2

Quick Ice-Making

With the Quick Ice-Making function, it only takes 80 minutes for ice cubes to form as compared with conventional ice-making at 120 minutes.

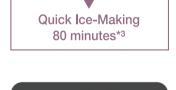
- *3 Time taken to make ice once (12 cubes) without opening the door based on room temperature outside the refrigerator being 30°C. Ice-making capabilities are affected by the frequency of door-openings and the room temperature. If quick ice-making is used once a day (around 7 hours), the energy consumed will be 30% (calculated value) higher than normal ice-making. This is based on testing conditions done by Hitachi.
- Indicator shows low water level decrease in water supply container
- Stop Ice-Making You can deactivate the ice-making function if you are going to be away for a long period of time.
- Ice-Maker Cleaner When using it for the first time, the ice-maker washes away dust from the ice making tray and the water supply pathways.



Small Item Storage Space (Only in R-F7300XS)

With a transparent lid for easy identification for neat storage of small items such as ice cream.





Water



DESIGNED TO PERFECTION

Hitachi Original Auto Doors & Drawers

Auto Doors





One door opens with a touch The door on the side you touched opens

Slide your finger and both doors open



The door on the first side you touched opens



The door on other side automatically opens

- This function reduces the initial burden of opening the doors, but does not fully open them
- · Depending on installation conditions, the opening angles of the doors may differ
- You can switch off the Auto function to open the doors manually
- The Auto function does not work when either the ice-maker or upper freezer compartment drawers are open.

Auto Drawers (Lower Freezer Compartment / Vegetable Compartment)

The auto drawers slide out effortlessly with just one touch, even when they are fully loaded.



- This function reduces the initial burden of opening the drawers but does not fully open them. When the function is activated, the drawers slide out about 15cm or more
- Depending on installation and other conditions, the distance the drawers slide out may differ, and sometimes they may automatically close after opening
- You can switch off the Auto function to open the drawers manually
- The Auto function opens either the lower freezer compartment drawer or the vegetable compartment drawer, but not both at the same time
- The vegetable compartment drawer may sound loud when sliding in and out.

Touch Screen Controller

Usually, the refrigerator projects a refined appearance with no visible control panel. Touch the MENU button and the control panel display appears on the flat surface of the door, so you can control your settings without having to open the door.



• The control panel switches off when not in use. However, the following settings will be displayed when activated: eco operation sign, water supply, door open/close (frequent opening/closing), energy saving, quick ice making, ice making stopped, quick chilling, quick freezing.

Scratch-Resistant Crystal Doors



Tempered glass that's scratch-resistant and easy to wipe clean is used for the doors.

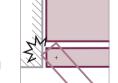
Convenient Installation

The left and right corners of the door surface are rounded, so they don't protrude outward very much when the doors are open. This design feature lets you match the refrigerator doors with built-in kitchen units and the fronts of other items of furniture for a flat lavout. And you can enjoy neat installation close to a wall without requiring a lot of space to enable opening and closing of the doors.



Refrigerator With rounded Space for radiation of heat Door

corners Even when the doors are open, the corners don't protrude outward very much.



Without rounded corners

When the doors are open, the corners protrude outward a lot.

* If a wall or item of furniture is located in front of the refrigerator leaving insufficient space, the refrigerator compartment doors cannot be fully opened. Please make sure there's enough space at the side of the refrigerator to enable radiation of heat.



Specifications

Model Number		R-F7300XS	R-F6800XS	R-F6800S	R-F6200S	R-F5700S	R-SF45FMS	R-S42EMS
Body Color								
		Crystal Mirror (X)	Crystal Mirror (X)	Crystal Black (XK) Crystal White (XW)	Crystal Black (XK) Crystal White (XW)	Crystal Black (XK) Crystal White (XW)	High Bright Stainless (SH)	High Bright Stainless (SH)
Gross Capacity [L]	Standard (ISO)	788	722	722	657	589	457	425
	Refrigerator Compartment	348	319	319	291	262	212	216
	Vacuum Compartment	47	44	44	40	34	21	_
	Vegetable Compartment	140	126	126	115	104	80	72
	Ice Compartment	33	27	27	27	27	22	21
	Freezer (Upper + Lower)	220	206	206	184	162	122	116
Net Capacity [L]	Standard (ISO)	580	533	533	478	432	332	323
	Refrigerator Compartment	342	317	317	282	257	202	206
	Vacuum Compartment	18	16	16	14	12	8	-
	Vegetable Compartment	95	85	85	78	70	51	52
	Ice Compartment	8	6	6	6	6	5	5
	Freezer (Upper + Lower)	117	109	109	98	87	66	60
Refrigerator Compartment	Vacuum Compartment	O Platinum Catalyst	O Platinum Catalyst	O Platinum Catalyst	O Platinum Catalyst	O Platinum Catalyst	O Platinum Catalyst	_
	Powerful Cooling	0	0	0	0	0	0	0
	Tempered Glass Shelves (Upper two shelves)	0	0	0	0	0	_	_
	Height Adjustable Pocket/Shelf	0	0	0	0	0	0	0
	Movable Egg Case	0	0	0	0	_	_	_
Freezer Compartment	Powerful Freezing	0	0	0	0	0	0	0
	Aluminum Tray (Upper + Lower)	0	0	0	0	0	0	O (Only Upper)
	Three-Layer Freezer Case & Tall Storage (Lower Freezer Compartment)	0	0	0	0	0	0	0
	Automatic Ice-Maker	0	0	0	0	0	0	0
Vegetable Compartment	Aero-care Vegetable Compartment (With Platinum Catalyst and Moisture unit)	0	0	0	0	0	0	_
Door	Tempered Glass Surface	0	0	0	0	_	_	_
	Auto Door (Refrigerator Compartment)	0	0	-	-	-	-	-
	Auto Drawer (Lower Freezer Compartment and Vegetable Compartment)	0	0	0	0	-	_	_
Other Feature	Triple Deodorisation Filter	0	0	0	0	0	0	0
	Frost Recycling Cooling	O (With Hybrid Defrost)	O (With Hybrid Defrost)	O (With Hybrid Defrost)	O (With Hybrid Defrost)	O (With Hybrid Defrost)	0	0
	Eco Intelligent Control	0	0	0	0	0	0	0
	Smart Lifestyle Memory	0	0	0	0	0	0	0
	Energy Saving Mode	0	0	0	0	0	0	0
	Control Panel (Touch Screen Controller)	0	0	0	0	0	-	_
D: :	D x H [mm] *1	880 x 738 x 1833	825 x 728 x 1833	825 x 728 x 1833	750 x 738 x 1833	685 x 738 x 1818	650 x 648 x 1818	600 × 669 × 1798

*1 Excluding handle and leg cover

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Net Capacity measured according to ISO (International Organization for Standardization) Standard (ISO Storage Volume).

All models & specifications in content are subjected to change without prior notice. Color tone of actual products may differ from those shown in this catalogue.



