Our commitment to you

Our innovative products are designed with the environment in mind, with low emission technology and high efficiencies, as well as a host of other great features.

Rinnai is committed to delivering efficient, well designed and engineered lifestyle solutions offering a host of benefits including versatility, safety, control, water conservation and guaranteed reliability.

Backed with extensive warranties and after sales service teams, Rinnai is proud to be the No.1 choice for continuous flow hot water. In addition, our range of solar hot water systems boast market leading efficiencies.

hotechnology

It's time to think again about the way we heat our water.

We need a new approach. Fresh thinking. Significant innovation. Better products. Deeper knowledge. And it's here.

hotwatertechnology.com

A powerful, in-depth resource for everyone in the hot water industry. it's the only place you need to visit for everything you need to know.













ISO 14001 Environmenta Management System



This brochure is available electronically (PDF).

Scan the code with your smart phone and any QR code reader app to download.'

Alternatively, visit www.rinnaiuk.com

Rinnai

Rinnai UK Limited

No. 9 Christleton Court, Manor Park, Runcorn, WA7 1ST,

T: +44 (0) 1928 531870

F: +44 (0) 1928 531880

W: www.rinnaiuk.com

E: enquiries@rinnaiuk.com

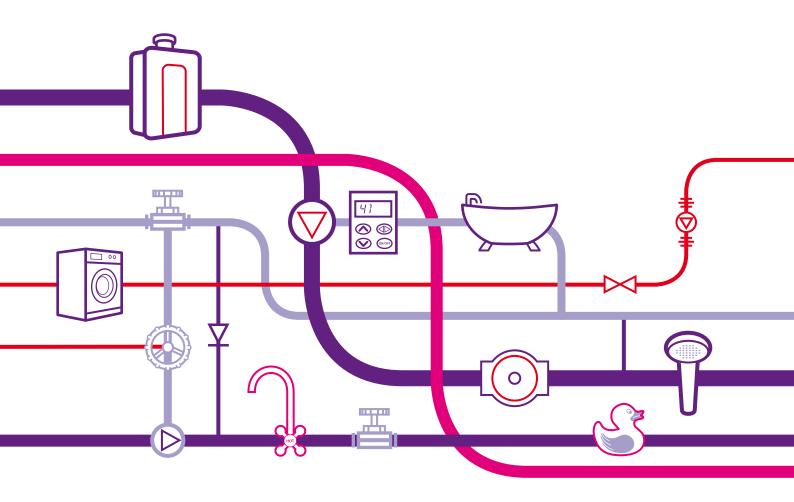
Rinnai UK is a registered trademark. Rinnai UK reserves the right to change specifications of any of its products without prior notice.

* Data charges may apply



Hot water solutions

Domestic



Experience our innovation

Rinnai

Global leader in gas appliance manufacturing



Striving for reliable and consistent quality

In order to supply innovative heating appliances that make our lives comfortable, Rinnai must develop and provide appropriate products while paying close attention to modern demands and problems. This requires advanced developmental and technological capabilities and a quality assurance system that reflects these features in each and every product. Rinnai strives to deliver quality to meet future requirements and is committed to making even more sophisticated appliances.



All appliances are quality management system ISO 9001 accredited.





Convenient, safe and ecologically sound - committed to technological innovations

Rinnai's quest to develop even safer and more convenient products includes constant study of the fundamentals of obtaining heat from gas.

We strive to improve combustion technologies and apply the most modern communication and associated management and production techniques across our operations.

We also continue to explore higher efficiencies through cleaner combustion, as exemplified in our condensing-type hot water units and pre-mix burner technologies.

Commercial Hot water solutions

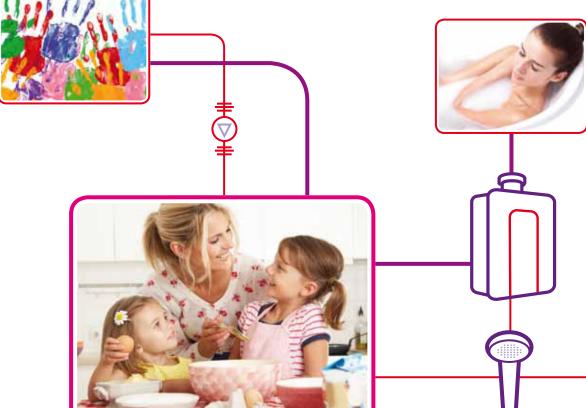
Contents

Company overview	02
Contents	03
About our domestic hot water solutions	04 - 05
Infinity 16i internal water heater	06
Infinity 17e external water heater	07
Infinity K26i condensing, internal water heater	08 - 09
Infinity PLUS	10 - 11
Internal flueing systems and accessories	12 - 13
Controls and accessories	14 - 15

Extras

Look out for the QR Codes throughout this brochure. Scanning one of these using your smart phone and any QR code reader app, will direct your web browser to extra content on the web. *





Domestic hot water solutions

"The Rinnai continuous flow water heaters represent our commitment to delivering the best systems available in the world today"

Rinnai produces over 12 million gas appliances every year, which are distributed to all parts of the world, and are all ISO 9001 and ISO 1400I certified (International standard for environmental management systems).

Backed with extensive warranties and fully qualified after sales teams, Rinnai is proud to be the No.1 choice for Continuous Flow Hot Water. Rinnai hot water systems fulfil your requirements for new or existing projects, providing the optimum solution by using individual or multiple appliances manifolded together.

Continuous flow systems are far more energy efficient than storage systems, and the preferred method of heating water where gas and water services allow. Restaurants and domestic properties are a prime example of this as they require high volumes of hot water at intermittent times of the day, often at accurate temperatures to ensure user comfort and safety.

With the Rinnai continuous flow hot water system, you will never run out of hot water.

Typical applications



- Domestic properties
- Café's, pubs and restaurants
- Offices, shops and hairdressers
- Small industrial units
- Caravan parks
- Leisure facilities

The Rinnai continuous flow water heater incorporates many safety features, one of which automatically cuts the heater off should the temperature rise by 3°C above the chosen set point.

Rinnai water heaters also reduce the impact on the environment. The market leading design has lower greenhouse emissions, due to Rinnai's reduced NOx burner technology.

Rinnai offers you the complete package

- CE and WRAS approved
- Digital temperature control for absolute safety
- Frost protection as standard on all units





Rinnai continuous flow systems

- Never run out of hot water
- Space saving, compact design means no floor space taken up
- Appliances and optional controllers allow you to control water temperature accurate to within 1°C of set point to ensure safety and comfort
- Endless hot water delivered more efficiently and with greater control, replacing bulky, inefficient, old-fashioned storage systems
- Highly efficient, providing extensive savings on energy consumption



Key to icons





Internal components are rigorously tested within specialist test laboratories to withstand and all weather conditions. The result is an unrivalled warranty on parts of 3 years.



Water heaters are available in the Infinity PLUS system or cascade arrangement. Any number of Rinnai water heaters can be manifolded together using our state of the art MECs or PAM sequencers to deliver a high efficiency water heating solution for even the largest demand.



Condensing technology incorporates dual heat exchangers achieving optimum water heating from every m³ of gas. Residual heat is captured from flue gases and transferred into the water being heated. Delivering up to 107 $\!\%$ efficiency.



Ranging from 16-35 ltr/min





All models supply high levels of efficiency ranging from 83% to 107% with burner modulation down to 2.4kW.

High efficiency



Intelligent

Technologically advanced PCB system ensures intelligent functionality, including temperature accurate hot water delivery, gas modulation guaranteeing efficient gas usage, numerous safety features for user comfort and control, error messaging and BMS interfacing.



Water heater is designed for internal wall mounting with extended flue runs.





Water temperature accurate to within 1 degree of the set point; this is achieved by strategically placed microprocessors monitoring the water temperature in excess of 100 times per second.



- Multiple safety devices
- Combustion Fan Sensor -Ensures flue gases are exhausted

- Hot water Delivery Thermistor -30 ensure water temperature is accurate within 3 degree of set point
- Fusible Link Full electrical lockout overheat
- Flame Rod Ensures burner is lit
- Water Pressure Relief Valve prevents bursting



Water heater is designed to be mounted externally and comes with frost protection as standard.





A concentric flue provides combustion air intake whilst emitting flue exhaust to the outside reducing the risk of harmful gases Room sealed entering the room.



Frost protection is fitted as standard on all Rinnai appliances, safeguarding your water heating against the elements.



Rinnai domestic range Standard





Rinnai Infinity 16i internal water heater

"100% accurate water temperature control"

Sudden changes in water temperature, causing cold showers or scalding hot baths are a thing of the past with Rinnai's Infinity 16i water heater.

Unlike many competitors, the water temperature you set is the water temperature you get. So, if you are showering at, say 42°C, and someone turns on a tap elsewhere in the house, the temperature will not vary.

"IPx4 rated, can be mounted in zone 2 within bathrooms"

Rinnai Infinity 16i is the perfect solution to hot water requirements for domestic properties/dwellings and light commercial use. It is designed to allow maximum flexibility when choosing where to install it, as it does not have to be mounted on an external wall. The Rinnai Infinity 16i is designed for use directly off the mains and therefore there is no need for large, ungainly storage vessels.

















Internal

rnal

High flow rate

Frost

Specifications

Installation	Internal wall mounted
Height	675mm
Width	370mm
Depth	103mm
Weight	18kg
Exhaust system	Room sealed
Temperature range	35°C - 60°C
Ignition method	Direct electronic
Gas consumption	
Natural gas	4.7kW - 34.9kW max
Propane	4.9kW - 36.8kW max
Hot water delivery capacity	15.2 ltr/min raised 25°C
Min operating water flow	2.4 ltr/min
Nominal operating pressure	1 - 7 bar
Power supply	230V AC 50Hz 1ph
Electrical consumption	68W



Rinnai Infinity 17e external water heater

The Rinnai 17e external water heater has the added advantage that the unit is externally mounted. This feature gives greater flexibility at the design stage and can offer an alternative solution where flue runs are problematic or internal space is not available.

As with all units in the Rinnai range the 17e has full frost protection.

A range of external ancillary items including a pipe cover box and security cage are available where necessary.

Capable of flow rates of up to 510 litres per hour at a 50° C rise, the 17e is suitable for multiple applications, such as café's, small restaurants and kitchen facilities.





















Specifications

External wall mounted
503mm
355.6mm
181mm
17kg
Forced exhaust
37°C - 75°C
Direct electronic
37.1kW
29.7kW
17 ltr/min raised 25°C
1 - 10 bar
67W Normal 100W Max (Frost Protection)

Rinnai domestic range Condensing



The condensing technology within the K26i delivers up to 107% gross thermal efficiency, which translates to significant energy savings when compared to their

• Energy efficient -K26i 107% net efficiency*

conventional counterparts.

- Saves space, water and energy
- Limitless applications
- Compact design with internal and weather-proof external models
- Temperature accurate hot water delivery

Rinnai's unique condensing technology incorporates two heat exchangers to achieve optimum water heating generated from every cubic metre of Natural Gas or LPG. These compact wall mounted water heaters capture residual heat from its flue gases and transfer it into the water being heated.

The K26i also incorporates multiple safety features ensuring temperature accurate hot water delivery and eliminating scalding.



















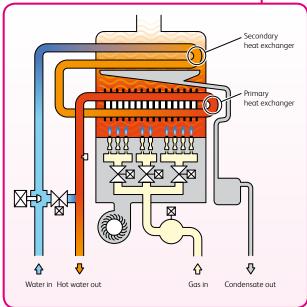












Dimensions

Internal condensing heater



100 103.2 195



Specifications

185.4 122.6 100

Model Infinity K26i (internal)			
Installation	Internal	Weight	29 kg
Fuel	Natural Gas or LPG *	Water flow rate	1.5** to 35 ltr/min
Control	Modulating	Minimum operating pressure	1.0 Bar
Gas consumption		Noise level	50 db(A)
Nat Gas	48.3 kW max	Connections	
LPG	47.6 kW max	Gas	3/4 bsp
Exhaust type	Internal - Forced room sealed(Concentric)	Water Inlet	3/4 bsp
Ignition	Electronic	Water outlet	3/4 bsp
Burner	Stainless steel	Condensate outlet	1/2 bsp
Low NOx	Less than 50ppm for all heaters	Electrical Supply	230V AC 50Hz 1ph

 $^{^{\}star}\;$ Separate models available for Natural gas or LPG fuel.

^{**} Minimum flow rate based on temperature set point and inlet conditions.

Cascading / manifolding water heaters

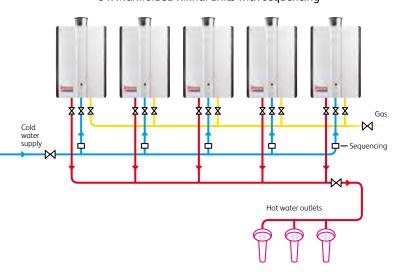


Rinnai's new Infinity PLUS is a custom made water heating solution that brings together multiple units of our award winning condensing continuous flow water heaters into single, easy to handle modules.

The Infinity PLUS system incorporates water heaters, skid systems with cable trays, pipe work and electrical connections providing the complete pre-fabricated turn key solution. All that is needed is the final connections to the associated services.



5 x Manifolded Rinnai units with sequencing





Note: Common header flue kits are available to further streamline installation.

Contact Rinnai for more details.

Infinity PLUS has been developed to guarantee the maximum amount of affordable, ecologically friendly, safe temperature controlled hot water required at any one time by even the most demanding user.

Each Infinity PLUS module comprises either two or three Rinnai condensing units and as any number of modules can be manifolded, the capacity is infinite even where demand for instantaneous hot water peaks massively at certain times of the day.

ONLY Rinnai offers you the complete commercial package:

- · Largest capacities on the market
- Near mains pressure flow
- CE and WRAS approved
- Low NOx emissions
- Temperature accurate hot water delivery eliminates scalding and ensures customer comfort
- Common header flue kits are available to further streamline installation

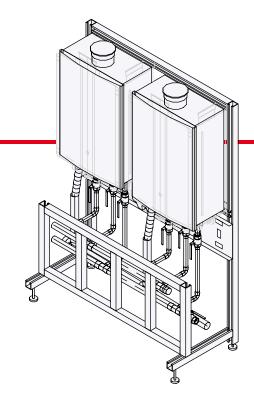
An optional electronic control system can link each heater, turning each one on as required.

The system automatically evens out the work load between units to minimise wear and tear.



Infinity PLUS condensing water heaters

						$\overline{}$
Gross efficiency				95.01%		
Number of units		1	2	3	4	5
Nat Gas kW input		48.3	96.6	144.9	193.2	241.6
Nat Gas kW output		45.9	91.8	137.7	183.6	229.5
Temperature rise by	Litres per	Infinity K26i				
-	Second	0.438	0.876	1.315	1.753	2.191
25°C	Minute	26.3	52.6	78.9	105.2	131.5
	Hour	1,577	3,155	4,732	6,310	7,887
	Second	0.365	0.730	1.095	1.461	1.826
30°C	Minute	21.9	43.8	65.7	87.6	109.5
	Hour	1,315	2,629	3,944	5,258	6,573
35°C	Second	0.313	0.626	0.939	1.252	1.565
	Minute	18.8	37.6	56.3	75.1	93.9
	Hour	1,127	2,254	3,380	4,507	5,634
	Second	0.274	0.548	0.822	1.095	1.369
40°C	Minute	16.4	32.9	49.3	65.7	82.2
	Hour	986	1,972	2,958	3,944	4,930
45°C	Second	0.243	0.487	0.730	0.974	1.217
	Minute	14.6	29.2	43.8	58.4	73.0
	Hour	876	1,753	2,629	3,505	4,382
50°C	Second	0.219	0.438	0.657	0.876	1.095
	Minute	13.1	26.3	39.4	52.6	65.7
	Hour	789	1,577	2,366	3,155	3,944



Note: For higher temperatures, refer to our commercial range

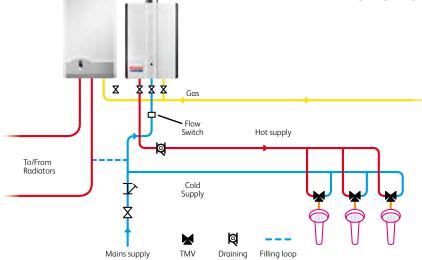
What is the Rinnai Twin Flow System?

The Twin Flow System features the ability to link a high performance gas fired condensing boiler for the central heating and a continuous flow domestic water heater. Together, the boiler and heater provide an energy efficient system sufficient to heat a large family home or light commercial premises.

- Never run out of hot water
- Eliminate scalding
- Guarantee user comfort and control
- Save money on your energy bills

Contact Rinnai for more information:

01928 531 880





Internal flueing systems and accessories

Flue Kits for 16i

Infinity 16i Standard Horizontal Flue Kit: Code: 952-016-004

- 90 degree adapter F/F 60/100
- 60/100 horizontal terminal
- Black outer wall plate
- White inner wall plate

Used for installations where terminating horizontally directly back through the external wall that the unit is mounted on

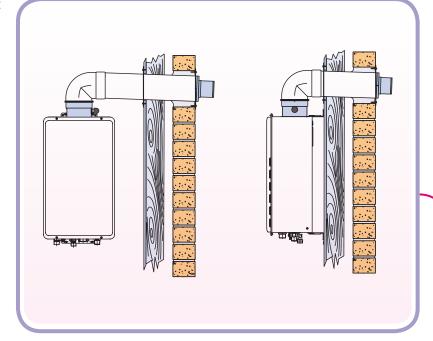
Infinity 16i Standard Vertical Flue Kit: Code: 952-016-002

- Straight adapter 60/100 x 80/125 with trap
- 80/125 roof terminal
- Attic clamp

Used for installations where terminating vertically

Infinity 16i Horizontal Extension Kit: Code: 952-016-003

- 80/125 horizontal terminal
- Straight adapter 60/100 x 80/125 with trap
- Black outer wall plate
- White inner wall plate

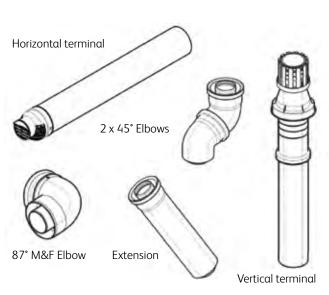


Extended flue runs

For installations using extensions and terminating horizontally. Although the 16i heater top connection size is 60mm inner diameter and 100mm outer diameter all extension pieces are from the standard range of 80/125mm flueing. All extensions, bends, brackets and flashings should be chosen from that range. When extending the heater must have a 60/100 to 80/125 adapter with a condensate trap on the top of the unit. No extensions can be run in 60/100 flue. Maximum flue length is 10m less 1m per bend, up to a maximum of 4 bends. All flue extensions incorporate a condensate trap; this must have a drain off for flue runs over 1.5m and can be left capped for shorter flues.



Plastic flues and accessories for K26i condensing water heaters



Notes

- 1 The condensing flue is 80/125mm plastic / plastic.
- 2 A siphon pack is not required for condensing units.

Plastic flues and accessories for K26i condensing water heaters

Standard horizontal flue kit

For use where installations terminate horizontally.

Contents: 80/125mm wall terminal (950mm), 87° bend,
white wall gasket, black wall gasket. Code: 952-220-001

Vertical flue terminal

For use where installations terminate vertically.

Contents: 80/125mm Roof Terminal (950mm).

Code: 952-220-007





Additional parts for the flue system

Part	Code
250mm Flue extension	952-220-004
500mm Flue extension	952-220-005
1000mm Flue extension	952-220-006
87° Bend	952-220-003
45° Bend (Pair)	952-220-002
Roof Attic pipe clamp (125mm)	952-026-010
Standoff pipe clip (125mm)	952-026-012
Flat roof flashing (125mm)	952-026-008
Pitched roof flashing 5° - 25° (125mm)	952-026-017
Pitched roof flashing 25° - 45° (125mm)	952-026-011
Pitched roof flashing 35° - 55° (125mm)	952-026-018

Note: Common header flue kits are available to further streamline installation.

Contact Rinnai for more details.

Controls

Why install temperature controllers?

Remote temperature controllers allow precise temperature control by the user. The water heater will deliver the selected temperature even when the water flow is varied or more than one tap is in use.

Each remote controller can be individually programmed, however the water heater can only deliver one set temperature at any time.

Remote temperature controllers cannot override the master temperature setting made with the DIP switches within the heater.

- 12 volts DC supplied from the water heater (up to 50m cable run) - depending on model.
- 12 hour AM/PM Clock
- In-use indicator
- Diagnostic tool for service and maintenance

Maximum number of temperature controllers

Up to a maximum of four temperature controllers can be fitted to Rinnai water heaters depending on water heater model.

16i has purpose built integral conroller as standard and therefore cannot be fitted with MC or BC series control.

Any combination of Universal or Deluxe temperature controllers can be used with the following provisions:

- 1 Only ONE Deluxe master temperature controller can be installed
- **2** Up to TWO Deluxe bathroom temperature controllers
- 3 The FOURTH water controller MUST BE a Universal controller (wired)





Universal remote controller

Our smallest and most economical model, the Rinnai compact controller can be installed in the kitchen, bathroom, en suite, even the laundry.

At the touch of a button you can change the temperature up or down as required. The 'transfer' button is a safety feature that ensures no other controller in the house can change the temperature whilst the hot water is running.

Code: MC-91-2A

Basic diagnostics



Deluxe kitchen remote controller

For use in the kitchen and the laundry, as with the standard controller, with the added benefit of working in conjunction with your deluxe bathroom controller.

When your bath is ready the recorded message or voice function sounds on all deluxe controllers.

Code: MC-100V-1A (not for bathrooms)

Comprehensive diagnostics





Deluxe bathroom remote controller

Deluxe bathroom controllers are complete with integral clock, speaker and volume controls, allowing you to fill a bath to the desired level and at the precise temperature you want, at the touch of a button.

The controller will automatically turn off the hot water and a voice recording will advise you when the bath filling is completed.

You can select any volume of water, small volumes for youngsters in a bath to large volumes for spas.

Code: BC-100V-1A

- Auto bath fill
- Comprehensive diagnostics

Electronic sequencers

MSB-M Master board + 1 slave Code: REU-MSB-MB

(1 per two water heaters)

REU-C1 Slave cables Code: REU-MSB-C1

(1 per additional heater)

REU-C Master board interlink Code: REU-MSB-C2

(1 per extra master board)

EZ-Connect Code: REU-EZC-1US

Low cost alternative to MSB for just 2 heaters

Accessories



Pipe cover boxes

17e Pipe cover box. Code: PCD01-WH

Sequencing valve

Pressure Activated Manifold (PAM) Valve Code: REV-PVA-1

Heater guards

Universal external water heater guard. Code: 956-000-003 Water heater terminal guard. Code: 956-000-001

Pipe cover

Allows the pipework to be properly lagged after installation. The cover can be easily attached to the Rinnai Infinity external units to cover pipes and valves.

Security cage

The cage is available to protect the external units from theft and damage. They also protect the external air outlet when located in a low position.

