

# Impetus Instantaneous Gas-fired Water Heaters



- Hot water recovery rates from 7.7 to 17.5 l/min at 50°C temperature rise
- Fully modulating pre-mix burner with 8:1 turndown
- Efficiencies of up to 96%
- Low NOx emissions <29mg/kWh
- 316 Ti Stainless Titanium Heat Exchanger
- Available for Natural Gas or LPG



**Lochinvar**<sup>®</sup>  
HIGH EFFICIENCY BOILERS & WATER HEATERS

# Lochinvar

## Impetus Water Heaters

Impetus is a range of instantaneous gas-fired water heaters, available in 3 models with hot water recovery rates of up to 17.5 litres per minute, based upon a temperature rise of 50°C.

These water heaters work on the principle of instantaneous flow, reacting immediately to hot water demand. This means that standing losses are minimal and in combination with high efficiency, Impetus water heaters can provide an economical and reliable supply of hot water.

They are designed for wall-mounted installation and are a compact water heating solution for a range of domestic or light commercial applications, such as hairdresser salons, cafes and restaurants, health centres, bed and breakfast establishments and offices.



Impetus Water Heater  
3 models available

### Ti Stainless Steel Heat Exchanger

The Impetus Water Heater incorporates a 316 Ti Stainless steel heat exchanger, which provides resistance to corrosion, and operates in a two-pass mode. This high quality heat exchanger enables the units to operate at working pressures of up to 10 bar.



### Accurate temperature control

Impetus Water Heaters can operate at temperatures of up to 75°C, making them suitable for a range of hot water requirements, and particularly where an anti-legionellae pasteurisation regime is required. The product design also incorporates accurate temperature control; within +/- 1°C at published recovery/flow rates. The advanced integral controls provide display of water heater status and water outlet temperature.



### Ease of Maintenance

Impetus units have been designed with the maintenance engineer in mind. On-board controls provide self diagnostic information and all components can be accessed from the front of the unit.



### Low NOx Emissions

Impetus water heaters have low NOx emissions, and with emissions lower than 24mg/kWh, models IM550 and IM1250 qualify for the maximum 2 credits on projects which are submitted for BREEAM Assessment.

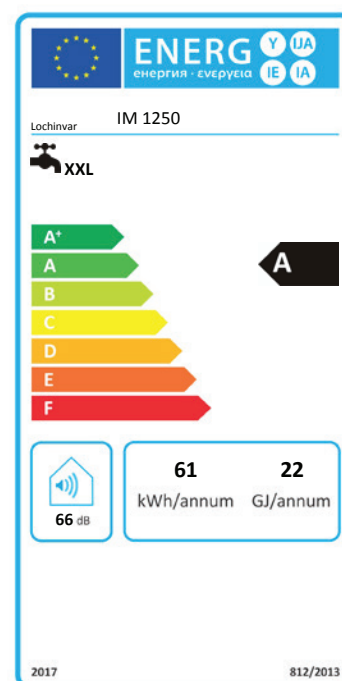
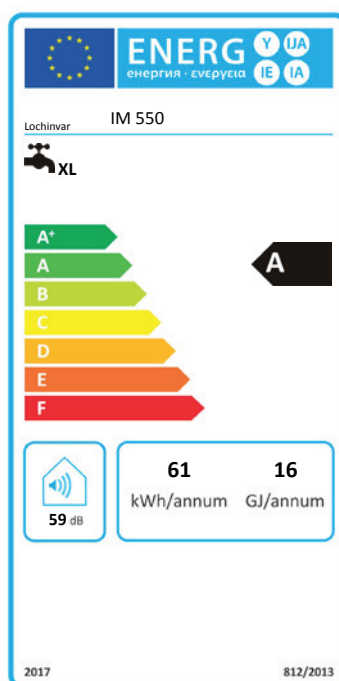
### Highly Efficient Operation

The fully modulating burner has a turndown ratio of 8:1, and combined with the use of condensing technology, enables Impetus units to achieve the following levels of efficiency:

**Seasonal Efficiency (Building Regulations) – up to 96%**

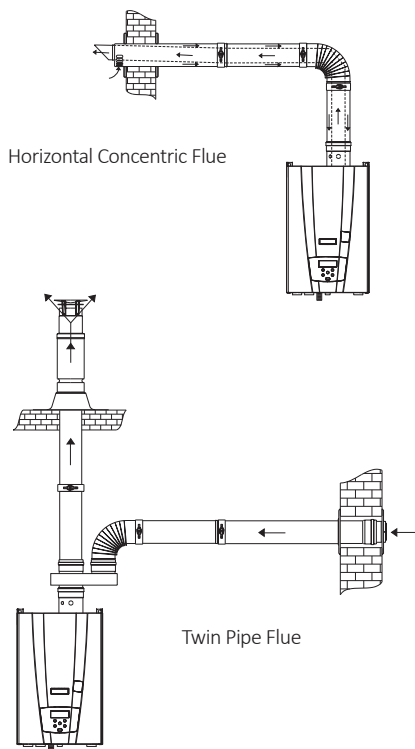
**Water Heater Efficiency (ErP/EcoDesign) – up to 92%**

All models fall within the requirement of the ErP Energy labelling requirement and all models have achieved rating A.



## Impetus Flue Options

Impetus Water Heaters can be installed with Horizontal or Vertical Concentric Flue, Twin Pipe Balanced Flue or Conventional Flue.

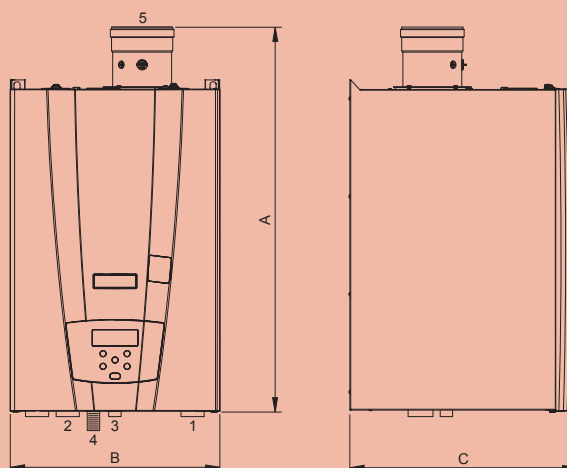


## Flue systems

CONCENTRIC FLUE SYSTEM			
Description	Unit	Models IM550 to IM750	Model IM1250
Size	mm	60/100	80/125
Maximum length	m	10m	10m
Equivalent 45° bend	m	0.5	0.5
Equivalent 90° bend	m	1	1

TWIN PIPE FLUE SYSTEM				
Description	Unit	Model IM550	Model IM750	Model IM1250
Size	mm	80/80	80/80	80/80
Maximum length Air inlet	m	10	6	2.5
Maximum length Flue outlet	m	10	6	2.5
Equivalent 45° bend	m	0.5	0.5	0.5
Equivalent 90° bend	m	1	1	1

## Dimensional Drawings



## Impetus Water Heater- Dimensions (mm)

		IM 550	IM 750	IM 1250
1	BSPin	R 3/4	R 3/4	R 1
2	BSPin	R 1	R 1	R 1
3	BSPin	R 3/4	R 3/4	R 3/4
4	mm	ø 20	ø 20	ø 20
5	mm	60/100	60/100	80/125
A	mm	800	800	815
B	mm	445	445	445
C	mm	305	305	485

## Clearances

Front – 600mm

Above – 300mm

Below – 300mm

Sides – 100mm



## Technical Specification

Water Heater Model		IM 550	IM 750	IM 1250
Nominal Input (Net)	kW	25.5	32.0	57.8
Nominal Input (Gross)	kW	28.3	35.5	64.2
Gas Flow Rate (Natural Gas)	m <sup>3</sup> /hr	2.7	3.4	6.1
Nominal Output	kW	27	33.5	60.9
<b>Efficiency Data - Part L2</b>				
Seasonal Efficiency (Part L2 Gross CV)	%	96	95	96
<b>Efficiency Data - ErP and Energy Label</b>				
Ecodesign Energy Label rating		A	A	A
Water Heater efficiency	%	90	92	89
<b>General Data</b>				
NOx emission @0% O <sub>2</sub>	ppm	11	16	9
NOx emission @0% O <sub>2</sub>	mg/kWh	20	29	16
Recovery Rate @ 44°C	l/hr	527	655	1190
Recovery Rate @ 50°C	l/hr	464	576	1047
Recovery Rate @ 56°C	l/hr	414	514	936
Dimensions (height)	mm	800	800	815
Dimensions (width)	mm	445	445	445
Dimensions (depth)	mm	305	305	485
Water Content	litres	2.9	2.9	5.7
Weight (empty)	kg	36	36	48
Weight (full)	kg	38.9	38.9	53.7
Hot Outlet Connection	BSPin	1	1	1
Cold Feed Connection	BSPin	3/4	3/4	1
Gas Connection	BSPin	3/4	3/4	3/4
Electrical Requirements		230V/1ph/50Hz		
Power Consumption	W	169	162	235
Sound Power Level	LWA(db)	59	61	66
Maximum Flue Gas Temperature	°C	90	90	90
Max Outlet Temperature	°C	75	75	75
Maximum Working Pressure	bar	10.0	10.0	10.0

Energy Label, Product Fiche and ErP Data Table are available at [www.lochinvar.ltd.uk](http://www.lochinvar.ltd.uk)

### Ancillary Options

- Unvented kit
- Horizontal or vertical room sealed concentric flue assemblies
- Room sealed parallel (twin pipe) flue assemblies



For further information on the Impetus Water Heaters, including ICM & User Instructions and our full Warranty Terms and Conditions, please visit our website: [www.lochinvar.ltd.uk](http://www.lochinvar.ltd.uk)

