

HEATING SOLUTIONS

THE HYBRID

The sustainable heating system that cuts gas consumption by up to 82.5%.



At Intergas, we believe it's our duty to help cut carbon emissions by reducing our reliance on fossil fuels and contributing to a healthier, safer world in which we can all live, work and play.

At Intergas we've made that start. We've designed a hybrid heating system called Xtend that cuts gas consumption by up to 82.5%. It's a 'hybrid' because it combines two technologies: a gas combi boiler and an air source heat pump (ASHP). These appliances work together to generate low carbon heat and hot water for the home.

HOW TO MAKE A DIFFERENCE

We're all doing what we can to combat the effects of man-made climate change but, if we are to meet the Government's net zero carbon target by 2050, we need to make some fundamental changes to how we heat our homes. Why? Because 85% of UK homes use gas boilers which are responsible for 14% of all carbon emissions in this country. If we all used a little less gas, we could start making a real difference to our environment.

> The combi provides the hot water and the heat pump heats the rooms. A heat pump is ideal for well-insulated properties but, as the majority of UK homes aren't, it only operates effectively for 70-80% of the year.

During the colder months, the boiler assists the heat pump, providing the heat as well as the hot water. This means that there's no loss of comfort and the homeowner has heat and hot water when and where they want it.



WHY HYBRIDS MAKE SENSE

HOW HEAT PUMPS WORK

The simple explanation is that a heat pump operates like a fridge freezer but in reverse. The heat pump extracts warmth from the outside air, and this warmth is absorbed into a fluid. This fluid passes through the heat exchanger and compressor to raise the temperature and transfer the heat to water. This water then heats the radiators or underfloor heating.

WITH XTEND, YOU'LL GET MORE THAN YOU EXPECT...

Our Xtend hybrid is packed with so many features and benefits, it's easily one of the best in class. Xtend comprises an Intergas combi boiler (any compliant Intergas ErP combi), an indoor unit and a 5kW split outdoor unit (ASHP).

Because we wanted to ensure Xtend installations would be as hassle free as possible, we've designed software which cuts the configuration time - usually a 45-minute procedure - to under 10; all you have to do is scan the QR code on the indoor unit.

DESIGN FREEDOM

Our indoor control unit is one of the smallest on the market (it measures 55.7cm x 16.4cm x 27.5cm), which means the homeowner has choices on where it's installed, as long as it's within 15m of the boiler.

Similarly, the outdoor unit (ASHP), which is also compact (it measures 68.9cm x 96.8cm x 36.7cm), can be sited outside the property, providing it's within a minimum distance of 3m or a maximum distance of 25m from the indoor unit.

Please note: the installation must comply with manufacturer's instructions and buliding regulations.

RETROFIT IT!

There's even more good news: if a compliant Intergas ErP combi is already installed at the property, then Xtend - the indoor unit and outdoor unit (ASHP) - can simply be retrofitted to it, substantially reducing the installation time, not to mention the cost.

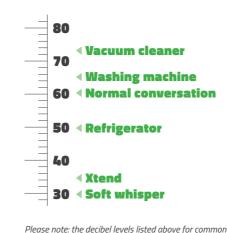
HYBRIDS ARE PRACTICAL AND ECONOMICAL

The cost of installing a hybrid heating system is significantly lower than that of a stand-alone heat pump as fewer alterations to the home are needed. Take the boiler, for example, providing it's compliant and has OpenTherm on/ off controls, you can save the cost of investing in a new one.

With a stand-alone heat pump the homeowner will have the expense of installing a separate heat pump cylinder and new radiators. This is because the heat pump's low flow temperatures (typically between 35-50°C) can't heat the water effectively and the radiators need to be upsized to provide a greater surface area to meet the heat demand.

SOUND ADVICE

If it's a pump, there will be some noise, but with our outdoor unit (ASHP) you can relax in the knowledge that at only 34dB(A) at 5m, it's exceptionally quiet. For context, a soft whisper is 30dB(A).



noise sources are typical values but they will vary.

- Compact indoor unit
- (ASHP)
- - Gateway

For boiler warranties, see page 9.



THE FULL PACKAGE

- Any Intergas (ErP) combi • 5kW split outdoor unit
- Comfort Touch thermostat

- Intergas system filter
- Fernox F1 inhibitor (265ml)
- Fernox F3 cleaner (265ml)
- Fernox F7 biocide (200ml)
- 7-year warranty on Xtend (Ts&Cs apply)



Hybrid heating systems are suitable for a diverse range of properties and deliver immediate carbon savings.



ULTIMATE CONTROL

Xtend becomes even more responsive and energy efficient when connected to our Comfort Touch OpenTherm room thermostat. Comfort Touch communicates with Xtend to automatically optimise its settings.

You can continue to use the Service Dashboard for remote control, monitoring and adjustments, providing you're connected to the Intergas Gateway, and the homeowner can turn their smartphone into a smart thermostat to change their central heating settings or programmes, providing they're connected to the Gateway.

measured using the Seasonal or SCOP

For an air to water heat pump to work, the outdoor unit must be supplied with energy in the form of an electrical current. This is combined with energy supplied from the outside air and thermal energy is then produced to provide central heating.

The key indicator of a heat pump's efficiency is its SCOP value. The value shows how much thermal energy (in kW) the heat pump produces for every kW of electrical current supplied, averaged out across one year (all four seasons).



ULTIMATE EFFICIENCY

When you install an Intergas combi as part of our hybrid heating system, you're guaranteed efficiencies others cannot match.

Thanks to our revolutionary bithermic heat exchanger, all our boilers condense in both heating and hot water modes, respond to the demand for heat faster and keep carbon emissions as low as possible.

Add to this a robust build, a maximum of four moving parts and no diverter valves in our combis, you have boiler reliability that's off the scale.

Product warranties

Combi boiler	Boiler + Xtend: new complete system			Xtend retrofit to boiler			Xtend retrofit to boiler + filter*		
	BOILER	HEAT EXCHANGER	XTEND	BOILER	HEAT EXCHANGER	XTEND	BOILER	HEAT EXCHANGER	XTEND
Rapid	10 yrs	10 yrs	7 yrs	5 yrs	10 yrs	7 yrs	7 yrs	10 yrs	7 yrs
Rapid Plus	10 yrs	10 yrs	7 yrs	8 yrs	10 yrs	7 yrs	10 yrs	10 yrs	7 yrs
HRE	15 yrs	15 yrs	7 yrs	9 yrs	15 yrs	7 yrs	11 yrs	15 yrs	7 yrs
Eco RF	15 yrs	15 yrs	7 yrs	12 yrs	15 yrs	7 yrs	14 yrs	15 yrs	7 yrs
Xclusive	15 yrs	15 yrs	7 yrs	12 yrs	15 yrs	7 yrs	14 yrs	15 yrs	7 yrs
Xtreme	15 yrs	15 yrs	7 yrs	12 yrs	15 yrs	7 yrs	14 yrs	15 yrs	7 yrs

*The system filter must be the Intergas system filter that was fitted at the same time as the boiler. These warranties are only valid if Xtend has been installed and maintained according to manufacturer's instructions

Xtend provides all the comfort of a traditional heating system, while cutting gas consumption by up to 82.5%.

Technical specifications

XTEND		A7 W35		
Nominal heat output - A7 W35	kW	5.04		
Output range	kW	1.8 to 5		
СОР		4.06		
Space heating energy class		A++		
Refrigerant type		R32		
Refrigerant charge	kg	0.85		
Noise level	dB(A)	58		
Sound power level at 1 metre	dB(A)	49		
Sound power level at 2 metres	dB(A)	42		
Sound power level at 3 metres	dB(A)	38		
Sound power level at 5 metres	dB(A)	34		
Heat pump temperature range	°C	-15°C to 25°C		
Maximum expected temp - system water from outdoor unit (ASHP)	°C	55°C		
Maximum pre-filled refrigerant pipe length without additional R32	m	6		
Minimum refrigerant pipe length	m	3		
Maximum refrigerant pipe distance between indoor and outdoor units	m	25		
Maximum head for refrigerant pipework	m	10		
Top up refrigerant after 6 metres	gms	25		

Indoor unit



Outdoor unit



Xtend is our most practical and sustainable solution to helping combat climate change. If you'd like to know more about our hybrid heating system or our stockists, please call us on 01527 888000 or email sales@intergas-heating.co.uk.

Indoor unit dimensions

Height	mm	557
Width	mm	164
Depth	mm	275
Weight (empty)	kg	10

Outdoor unit dimensions

Height	mm	689
Width	mm	968
Depth	mm	367
Weight (net)	kg	43

Technical specifications subject to change.

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