

Contactless flow measurement for the Building Services Industry. Katronic's ultrasonic flowmeters help to operate HVAC systems with greater efficiency and thus to reduce your costs and carbon footprint.

## Specifications

- **Installation:** Portable & fixed installed
- **Medium:** Heating & Cooling Liquids
- **Pipe Materials:** All common metals, plastics and more
- **Pipe Diameters:** 10 to 3,000 mm
- **Flow Velocities:** 0.01 to 25 m/s
- **Accuracy:** Up to  $\pm 0.5\%$  for volume flow and flow velocity

## Application



Large buildings house dozens of HVAC systems on their rooftops which have to be inspected, monitored and regulated.

## Instrument Solution



Portable ultrasonic clamp-on flowmeter KATflow 230 as example of a suitable instrument.

## Measurement Task

As their energy consumption causes considerable operating costs, the measurement of heating and air conditioning units has always been an issue of great importance in large buildings.

With the introduction of the Climate Change Levy (CCL) and the current economic downturn, an energy efficient operation and thus a thorough energy performance monitoring has gained even greater importance.

Whether the facility is a hospital, factory, airport or educational building the problem remains the same: How to gain maximum efficiency from the ageing systems and avoid large tax bills on energy consumption?

## Solution

A solution for this problem comes in form of the portable KATflow 230 flowmeter. It is not only capable of measuring flow rates but also temperature related energy consumption. It is therefore the perfect tool for everyone who wants to revise the settings of HVAC systems to increase the energy efficiency of buildings and thus to gain cost savings and environmental credibility.

Due to its wide range of process in- and outputs (current, digital open collector and digital relay), the KATflow 230 can also be applied to monitor and regulate HVAC systems. Katronic's fixed installed alternative is the KATflow 150 – a flexible flowmeter with optional energy measurement capability and process in- and outputs.

Katronic has been supplying various companies of the Building Service and Facility Management Industry for many years such as Homerton and Tayside University Hospitals, BSRIA, Trilon Limited, Adcock Refrigeration & Air Conditioning and Potterton.

- **Easy, quick and cost-effective installation on existing pipelines**
- **Measurement of various heating and cooling liquids including water, glycol, refrigerants and CIP chemicals**
- **KATflow 230 and 150 supplied with optional PT100 clamp-on sensors for Heat Quantity and Energy Efficiency monitoring**
- **Portable instruments supplied with optional wall thickness gauge for easier survey work**
- **Maintenance free, very low MTBR (mean time between repairs)**

**Katronic Technologies Ltd.**  
23 Cross Street  
Leamington Spa  
CV32 4PX  
United Kingdom

Phone: +44 (0)1926 882954  
Fax: +44 (0)1926 338649  
Email: [info@katronic.co.uk](mailto:info@katronic.co.uk)  
Web: [www.katronic.co.uk](http://www.katronic.co.uk)

