

**TENANTHERM™**

**Heat Interface Units**

SOLUTION POTENTIAL

ARMSTRONG





# SAVINGS OF MORE THAN 25%

# COMPLETE SOLUTION

**H**eat interface units provide a simple and convenient solution for the provision of trouble-free heating and instantaneous hot water in multiple residential buildings.

A high efficiency, centralised modular boiler system serves individual Tenantherm units located in each apartment or dwelling. This is far more energy efficient than installing individual gas fired boilers and can result in savings of more than 25%. Heat meters (complying with EN 1434) are integrated into each Tenantherm unit to facilitate accurate billing.



Armstrong are able to provide a complete solution incorporating high efficiency MBS boiler system, Design Envelope intelligent variable speed circulating pumps, Design Envelope intelligent variable speed booster pumps as well as the Tenantherm units.

We are also able to help in the design of fully optimised systems which take advantage of the potential reduction in first cost and whole life cost by leveraging the diversity of a multiple residential installation.



# MINIMAL MAINTENANCE

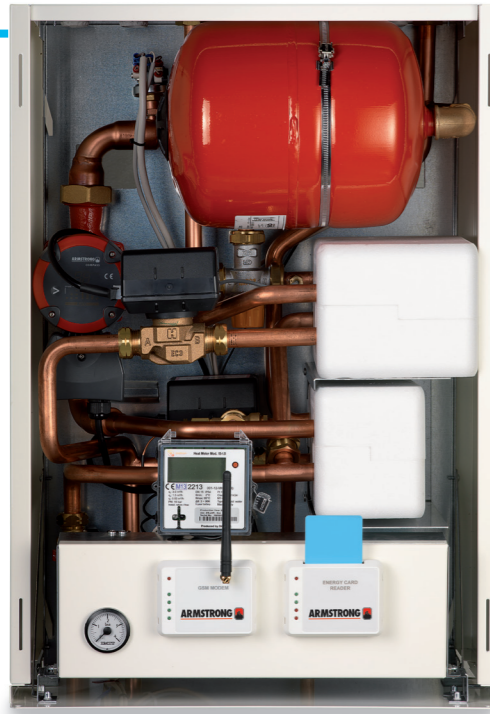
Technical Data Sheets are available for each unit

## PRODUCT PAGE

Savings of more than

25%

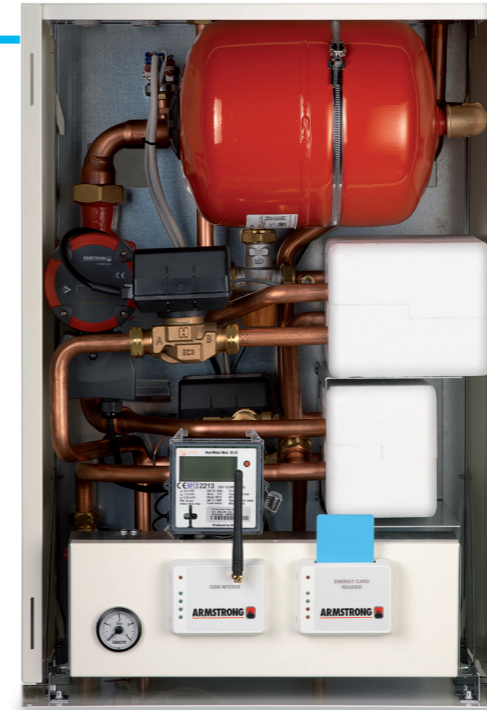
### TWIN PLATE



A wall mounted unit with two plate heat exchangers; one separates the apartment's heating circuit and the other separates the apartment's domestic hot water circuit (DHW) from the central supply.

Models are available with;  
30, 40 and 50kW nominal DHW capacity  
.....  
Up to 40kW heating capacity

### SINGLE PLATE



A wall mounted unit with one plate heat exchanger that separates the apartment's domestic hot water circuit (DHW) from the central supply. The apartment's heating circuit is fed directly from the central supply.

Models are available with;  
30, 40 and 50kW nominal DHW capacity  
.....  
Up to 20kW heating capacity

### SINGLE PLATE

#### Double Circuit



A wall mounted unit with one plate heat exchanger that totally separates the apartment from the central supply. A 3-port valve diverts secondary LTHW to the apartment's heating circuit or an indirect cylinder (provided by others)

Models are available with;  
30, 40 and 50kW nominal DHW capacity  
.....  
Up to 20kW heating capacity

### FS STORAGE



A floor standing unit with one plate heat exchanger that feeds the apartment's heating circuit or, via a 3-port valve, an integrated unvented DHW storage cylinder.

Models are available with;  
75, 150, 300 and 400 litre capacity cylinders  
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# REMOTE MONITORING

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ireless Metering uses GSM technology to transmit data from individual apartments to a mobile device (PDA) for data analysis and billing.

With the wireless module installed within the Heat Interface Unit, an individual meter reading can be captured using a walk-by radio receiver.

This hand held reader is used to collect individual readings from each Heat Interface Unit within the building, and then transfers the information in to a database to allow for analysis of the energy usage and for personalised billing.



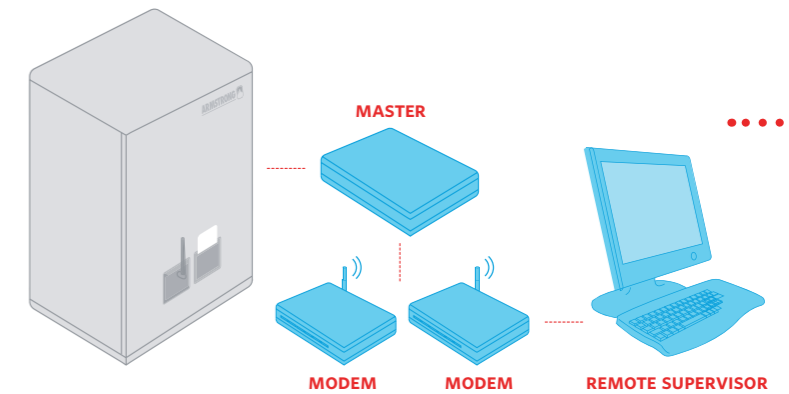
# BILLING

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he building manager sets the cost of energy unit (kWh), provides the end user with a smart card and the desired credit.

When the card is inserted in the card reader the ID and the credit are communicated to a master unit managing the whole system and, by means of a modem, to the report supervisor software that keeps the account of each user and provides reports of usage.

As energy is used, the master decreases the card credit accordingly. The amount of credit left on the card is indicated by the LEDs of the card reader and also shown on the room unit display.



CONTROLS INCLUDED





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ARMSTRONG FLUID TECHNOLOGY  
ESTABLISHED 1934

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## The key benefits are

- ⊗ Independent heating and hot water for each residence
- ⊗ Simple installation and commissioning due to factory assembled piping, wiring, controls and integrated heat meter
- ⊗ No flues or gas piping required within the apartments
- ⊗ No annual gas appliance inspection required
- ⊗ No additional room ventilation required
- ⊗ Remote monitoring of energy consumption, alarms and diagnostics
- ⊗ Minimal maintenance requirements
- ⊗ 'Pay as you go' or remote billing options
- ⊗ Optimum energy performance
- ⊗ Low return temperatures enable boilers to operate in condensing mode
- ⊗ Easily integrated with low and zero carbon technologies like solar thermal, heat pumps and CHP

For further support or product information please visit;

[armstrongfluidtechnology.com/whitepaper](http://armstrongfluidtechnology.com/whitepaper)  
[armstrongfluidtechnology.com/video](http://armstrongfluidtechnology.com/video)

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ENERGY  
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