



WATTS
INDUSTRIES
A Division of Watts Water Technologies Inc.

HEAT METER

*Watts' Heat meter
measures energy consumption on
device using clear water
as heating liquid*

Better comfort
&
Energy saving

Help the world to reduce CO2 emission



Watts Electronics



Watts Electronics, as part of Watts Industries, develops and manufactures on behalf of leading companies, predominantly in the HVAC sector but also into various different applications within the household appliances.

Combining electronics and mechanics, we bring solutions for your specific needs.

Thanks to this level of research and development, Watts Electronics offers cost effective and innovative solutions to several key European OEM's.

The company is constantly in touch with the academic world so as to provide our customers with state of the art expertise. The Group's motto "technology by nature" is a daily reminder to our employees that a methodical and clear-sighted approach adds value to the customer.

Watts Electronics has more than 550 highly skilled employees divided in our three manufacturing plants based namely Tunisia, Sweden and France.

For many years, we hold a leader position in the International Market thanks to our group sales network in the US, in Europe and in Tunisia.



ENERGY METERING

Presentation

“ Pay only for what you get “

With district heating or collective heating, cost are allocated on surface and not usage.
 With new Eu regulation: Individual energy use has to be precisely measured.
 Products need to follow special MID rules under metrology concept

Heat meter of Watts Industries measures energy consumption in installation which used water as coolant liquid. It can be used for heating and/or cooling systems. It can measure volumes thanks to pulse inputs. Datas are saved every week and could be consulted on screen at any time. They could be transmitted via MBUS on a PC.

System includes:

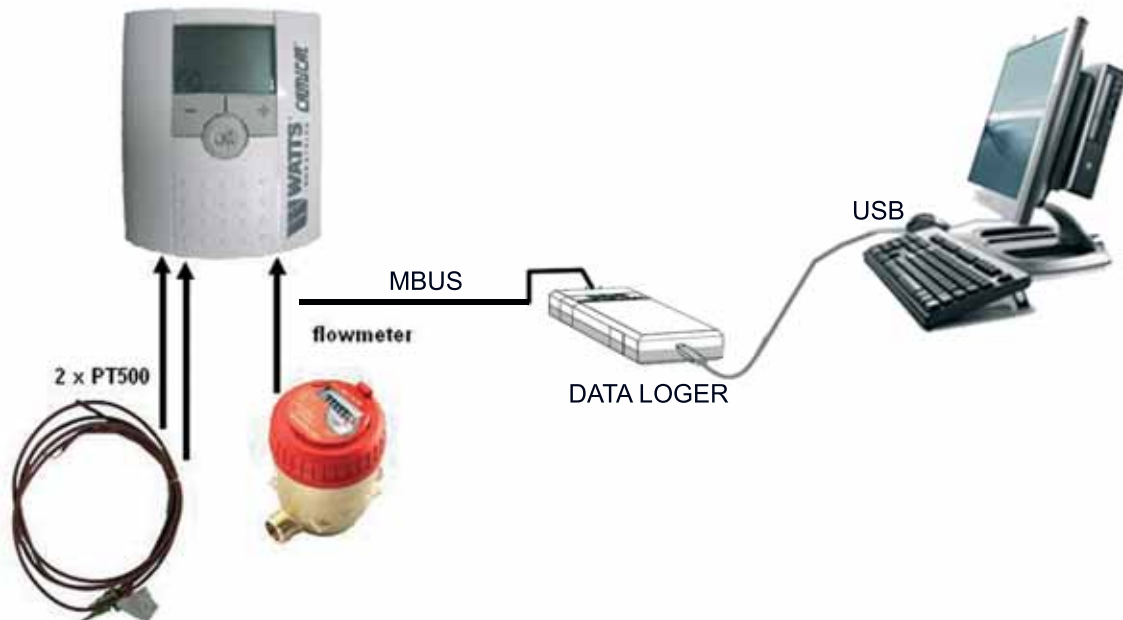
- an electronic control unit,
- 1 sealing label 'front' and 1 sealing label '2',
- 1 wall mounting ring,
- 1 instructions notice.



Operating

Watts' heat meter needs a paired of PT500 and a flow meter to be connected on system.

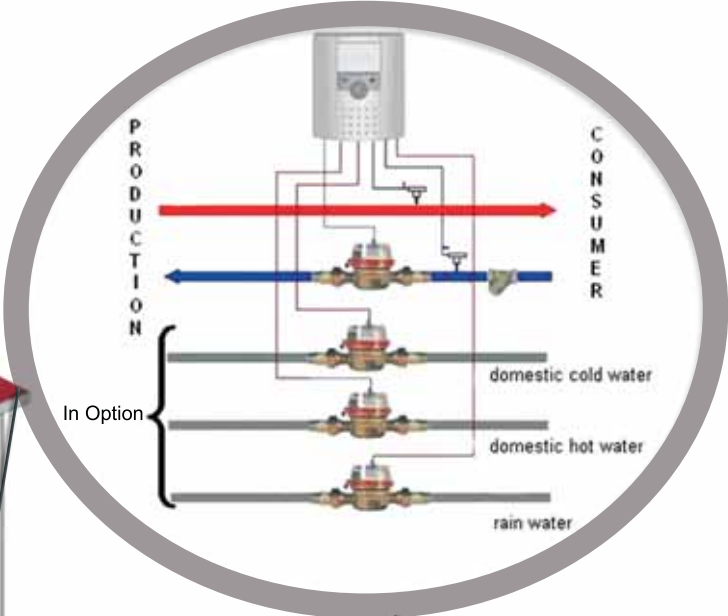
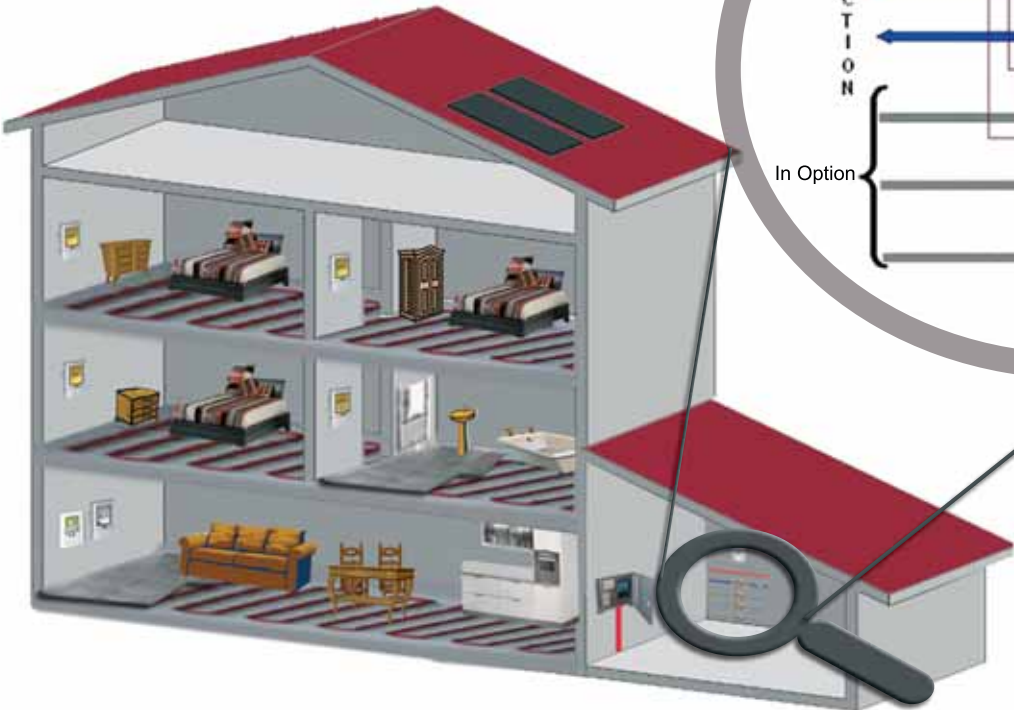
One PT500 has to be fixed on departure of heating circuit and the other on return. Flow meter has to be fixed on heating system too. At any time, heat meter calculates energy consumption thanks to temperature difference between departure and return of heating system and volume going through. Then, energy is cumulated and saved in heat meter. Several datas as heating energy accumulated, cooling energy accumulated, volumes, temperatures are saved every week on heat meter. These datas could be consulted at any time on screen or could be transmitted via MBUS on a PC.





Setting up

Heat meter measures energy consumption in device using water as heating liquid. It can be used for heating or/and cooling systems. User can added up to 3 flow meters to measure consumption of domestic water or rainwater for example.



Our different models

| designation | Version | temperature sensors | energy flow meter | domestic hot water/ domestic cold water/extra input |
|-------------------------|-----------|---------------------|-------------------|--|
| WAT CAMICAL H B 1L | Heat | Yes | 1L | 2,5L |
| WAT CAMICAL H B 2.5L | Heat | Yes | 2.5L | 2,5L |
| WAT CAMICAL H B 10L | Heat | Yes | 10L | 2,5L |
| WAT CAMICAL H B 25L | Heat | Yes | 25L | 2,5L |
| WAT CAMICAL H B 100L | Heat | Yes | 100L | 2,5L |
| WAT CAMICAL H B 250L | Heat | Yes | 250L | 2,5L |
| WAT CAMICAL H B 1000L | Heat | Yes | 1000L | 2,5L |
| WAT CAMICAL H B 2500L | Heat | Yes | 2500L | 2,5L |
| WAT CAMICAL H&C B 1L | Heat&Cool | Yes | 1L | 2,5L |
| WAT CAMICAL H&C B 2.5L | Heat&Cool | Yes | 2.5L | 2,5L |
| WAT CAMICAL H&C B 10L | Heat&Cool | Yes | 10L | 2,5L |
| WAT CAMICAL H&C B 25L | Heat&Cool | Yes | 25L | 2,5L |
| WAT CAMICAL H&C B 100L | Heat&Cool | Yes | 100L | 2,5L |
| WAT CAMICAL H&C B 250L | Heat&Cool | Yes | 250L | 2,5L |
| WAT CAMICAL H&C B 1000L | Heat&Cool | Yes | 1000L | 2,5L |
| WAT CAMICAL H&C B 2500L | Heat&Cool | Yes | 2500L | 2,5L |



Accumulated values

| Title | Menu | Submenu | Display | Description |
|--------------------|------|---------|---------|--|
| Accumulated values | A | 0 | HEAt_E | Accumulated calorific energy |
| | | 1 | CoLd_E | Accumulated frigorific energy (version heat&cool)* |
| | | 2 | VoL_ACC | Total volume (measured by hydraulic sensor KT) |
| | | 4 | In_1 | Volume of input 1 |
| | | 5 | In_2 | Volume of input 2 |
| | | 6 | In_3 | Volume of input 3 |

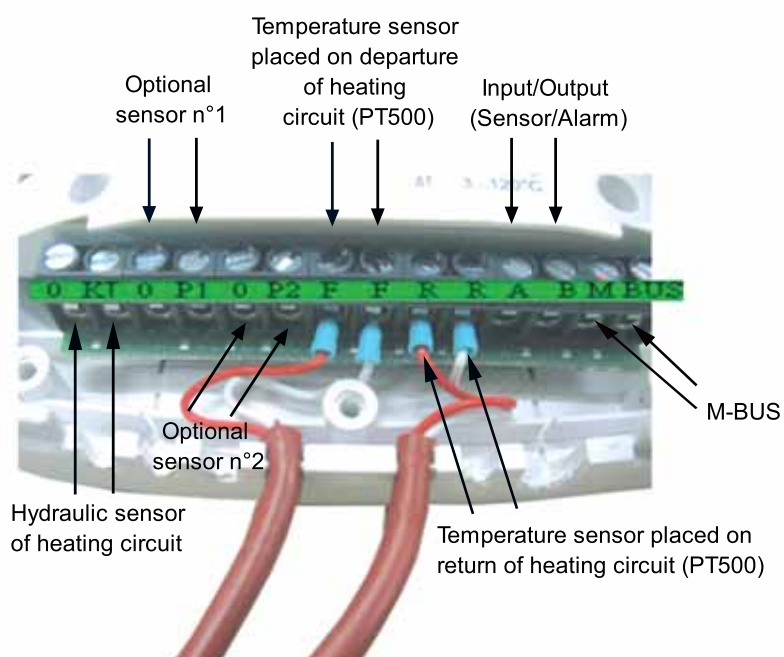
Instantaneous values

| Title | Menu | Submenu | Display | Description |
|----------------------|------|---------|---------|--|
| Instantaneous values | B | 0 | P_InSt | Instantaneous power |
| | | 1 | F_InSt | Instantaneous flow |
| | | 2 | t°C Hot | Temperature on the departure of the heating circuit |
| | | 3 | t°C CoL | Temperature on the return of the heating circuit |
| | | 4 | t°C dif | Temperature difference between departure and return of the heating circuit |

Fixed values updated week per week

| Title | Menu | Submenu | Display | Description |
|-------------------------------------|------|---------|---------|--|
| Fixed values recorded week per week | C | 0 | dAtE | Date of the registration |
| | | 1 | ACC E H | Calorific energy accumulated at the date of registration |
| | | 2 | ACC E C | Frigorific energy accumulated at the date of registration (version heat&cool)* |
| | | 3 | VoL S | Volume (sensor) at the date of registration |
| | | 4 | Vol C | Volume (according to energy calculation) at the date of registration |
| | | 5 | In_1 | Volume of input 1 at the date of registration |
| | | 6 | In_2 | Volume of input 2 at the date of registration |
| | | 7 | In_3 | Volume of input 3 at the date of registration |

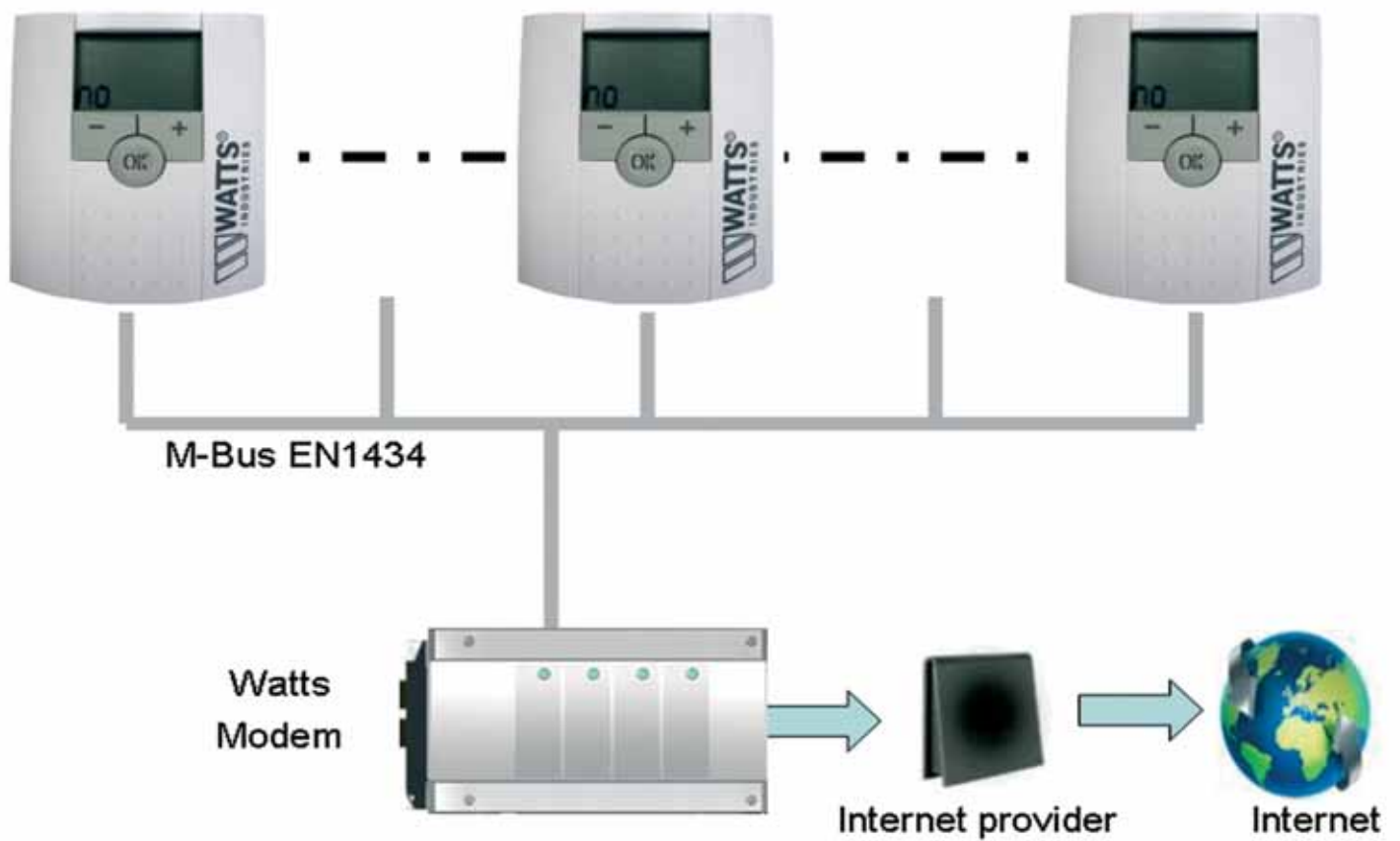
Connection





POSSIBLE FEATURES

Read Mbus through Internet Connection and our Web Module





KITS OR PACKAGE





Technology by nature

Product Range WATTS INDUSTRIES

- System disconnectors
- Backflow protection devices
- Check valves
- Safety units
- Safety relief valves
- Pressure reducing valves
- Automatic control valves
- Butterfly valves
- Shut off valves
- Measuring gauges

- Temperature control
- Expansion vessels
- Process switches
- Fuel products
- Gas products
- Electronics controls
- Installation protection products
- Radiator valves
- System products
- Manifolds and fittings



A Division of Watts Water Technologies Inc.

Watts Electronics

ZA des Tourettes, 43800 ROSIERES, FRANCE

Phone +33 471 57 40 49 - Fax +33 471 57 40 90

E-mail: sales@wattselectronics.com - Site: www.wattsindustries.com

