

THERMAL ENERGY

Metering and Monitoring

It's very important **to monitor and manage thermal energy consumptions** as for example in electricity.

To get a profitable and efficient management of energy demand useful for heating and cooling cycles of autonomous plants you have to arrange an equipment which allows fundamental data detection for physical heat calculation. This consents both **to check the accuracy of the amount billed by the supplier** and to make evaluations about loads distribution in different thermal areas of the plant.

By monitoring flow and return temperature of the circuit plant, through suitable temperature probes, and by metering the heat transfer fluid flow, it's allowed the calculation of thermal energy profiles over time.

Thermal Energy

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$$\text{Flow} \times \text{Heat specific of transfer fluid} \times \text{Temperature Difference}$$

The metering device for thermal energy ET-MLX311 supplies data to a special datalogger called X-Meter which acquires, registers and processes data by drawing the profile of each physical size measured. Finally, by interfacing with WEB it allows the data publication and the telemetering of the device by remote.

Displaying Data

- > Management and reading data through stand-alone software ES3
- > Web Telemetering data through WEB interfacing

