

KIT-e is the solution to manage all the industrial measurements in a simple and efficient way



# Free your energy management

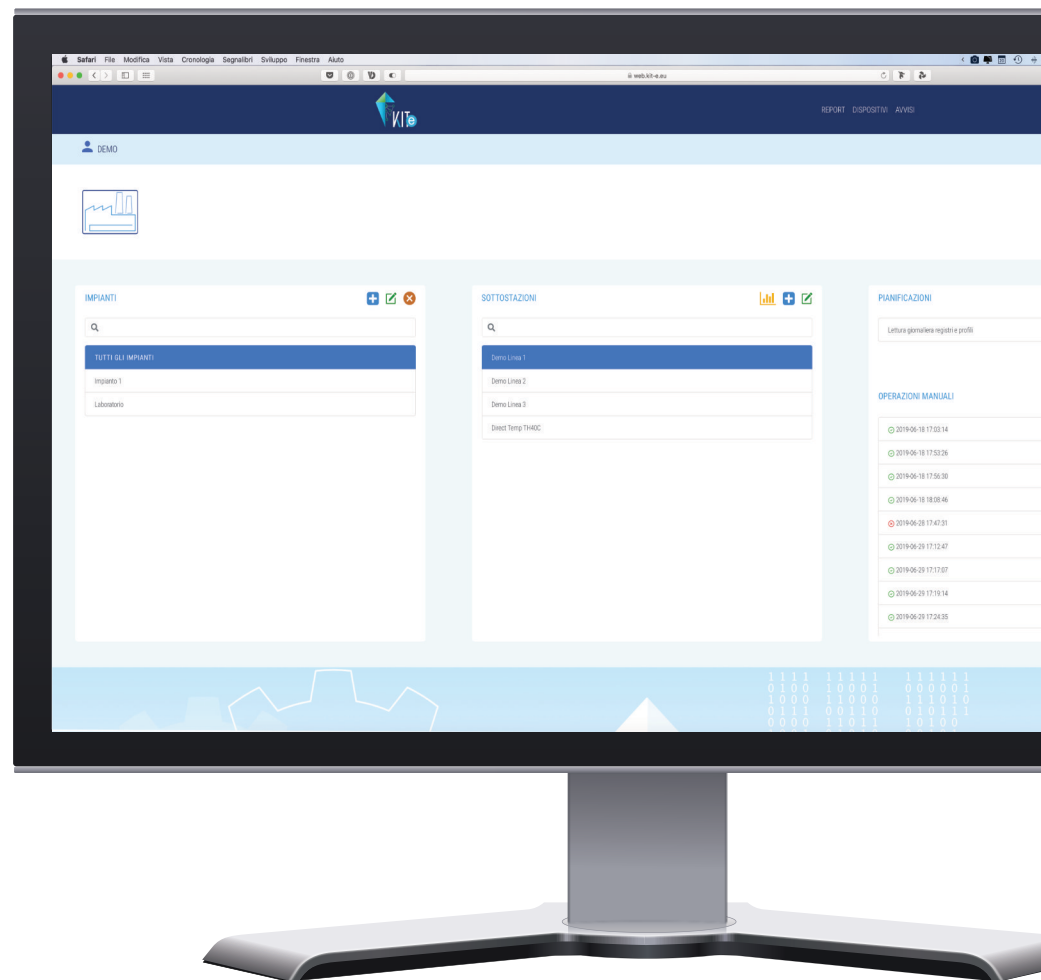
KIT-e is the system for the acquisition and management of energy measures through the cloud.

Complete and scalable, KIT-e has been designed to make the telemetry and the management of the plant energy carriers as simple and open as possible. KIT-e allows the reading of the production and consumption data from the electricity meters avoiding the need to install software, buy modems or other communication devices, and sign contracts with phone companies; furthermore, with KIT-e it's possible to collect the measurements of any type of energy meter (heat, gas, water ...) or field sensor and send them in real-time to the cloud. All the measurements can be then managed through the web site or using the apps for smartphone and tablets.

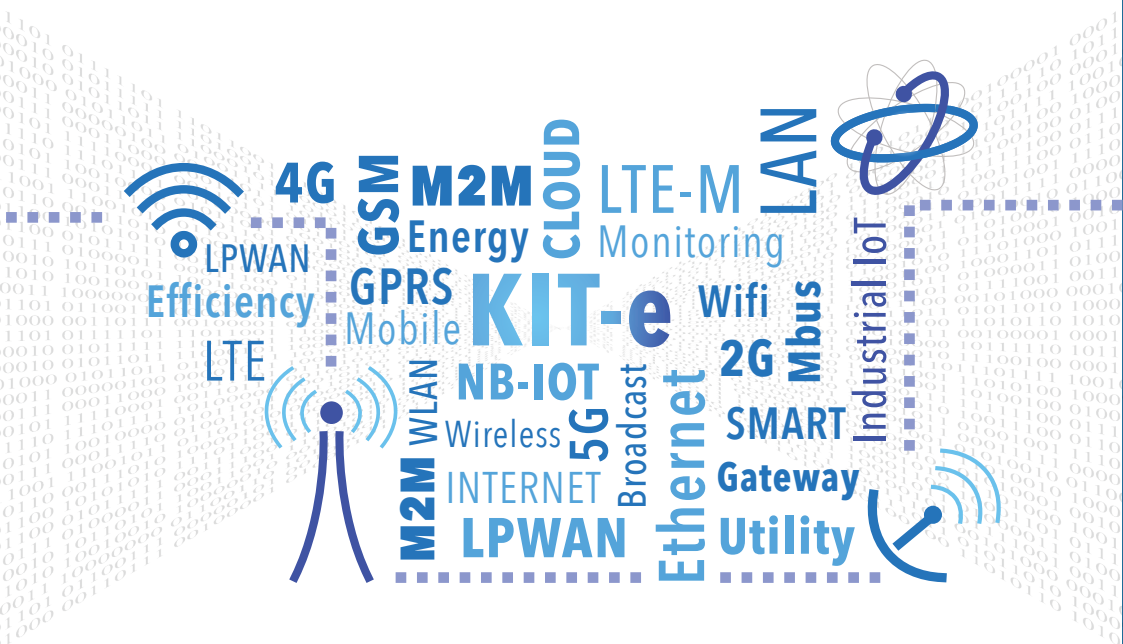
KIT-e offers a complete service, a wide range of measuring devices, reliable cloud databases and, for those who prefer a more traditional solution, also a powerful software, available in several versions, that can satisfy all the possible needs, from the management of a small installation, to the analysis of the production and the consumption of large plants distributed throughout the territory.

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KIT-e is the ideal solution for energy efficiency



KIT-e always finds a way to  
communicate with field devices



## Multi-protocol Multi-channel

KIT-e includes all the most common communication protocols for metering so that it can connect with the majority of the metering devices already installed in the plants.

It can be connected to analog and digital sensors and can download data from the measuring devices using the standard MODBUS RTU and MODBUS TCP protocols.

A wide range of communication modules is available for KIT-e users, such as Wifi routers, 2G and GPRS modems, 4G and NB-IOT modules. And thanks to the LoRa modules and concentrators, the connection of multiple meters located in the plant is made simpler and cheaper.

For data transfer to the cloud, KIT-e supports the standard REST and MQTT protocols.



# Historical and real-time data

KIT-e is the ideal system for the management of historical data: with KIT-e it is possible to acquire and manage load surveys related to any quantity and based on any integration period. The acquisition can take place through programmable scheduled queries (eg electric energy meters connected via GSM modem) or by direct upload (eg data loggers connected via NB-IOT, 4G ...).

Load curves can be organized and combined in reports, graphs and summaries, divided into tariff bands, multiplied by period-specific prices; it is possible to perform analysis, forecasts, comparisons between different periods and different forms of energy.

With KIT-e it is also possible to read and manage the data relating to the legally relevant registers of the meters.

But KIT-e also makes it easy to manage data in real-time: through the KIT-e Web portal, it is possible to view curves in real-time on a selectable time frame, with the indication of the maximum, minimum and average values. Furthermore, by setting one or more thresholds for the measurement channels, the system can trigger an alarm every time the limit values are reached; the alarms can be displayed on the website as well as pushed as notifications on smartphones and tablets by the Apps.

“ All your needs in one system, from historical analysis to timely reporting



The smart system for the acquisition of measurements



## KIT-e Blocks

The KIT-e modular data logger allows the acquisition of measurements from analog and digital sensors and from devices with MODBUS output.

By combining the CPU module with the signal acquisition modules and the communication modules the user can create the data logger suitable for his needs, that can transfer the data to the cloud using the desired communication channel. The KIT-e Blocks are self-configuring on the KIT-e system, but can also be used with different platforms as data upload is done through the standard REST and MQTT protocols.

The signal acquisition modules can be equipped with digital and analog inputs, and can be combined to obtain more complex data loggers. The analog input modules can be connected to the outputs of different types of probes and sensors (voltage outputs, current outputs, PT100 probes etc.).

Moreover, the modules can also be equipped with analog and digital outputs, which can be used for repeating incoming signals or controlled directly by the KIT-e system according to programmable conditions that may also involve different KIT-e Blocks connected to the system.

Data can be uploaded via the integrated Ethernet interface (that can be also connected to a Wi-Fi router) or via the communication "blocks" (4G and NB-IOT modules are available).

# KIT-e Sub

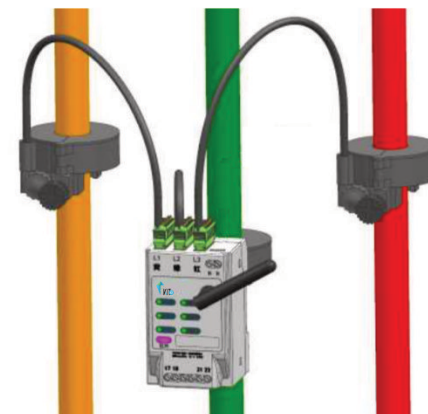
KIT-e Sub is an extremely compact and easy to install sub-metering device, that uses specially designed openable CTs to pick up the current and voltage signals.

The device can be connected to single-phase and three-phase systems and can measure not only the active and reactive energy but also several other parameters such as apparent energy, power factor, maximum demand, voltages and currents of each phase, the harmonics and even the temperature of the cables.

KIT-e Sub is equipped with a 4G, NB-IOT or LoRa integrated communication module; when LoRa module is used, a KIT-e LoRa concentrator is required in order to transfer of the measurements to the cloud.

The device is easy to be integrated into third-party systems as well since it is equipped with an RS485 Modbus RTU port.

“ Easy to install, accurate and powerful,  
perfect for efficiency analysis





KIT-e is a service owned by  
UICEE di Carazza Marioroberto & C. s.a.s

C.so San Maurizio, 81 - 10124 TURIN - Italy  
Phone: +39 0118122247 / +39 011 836851  
Fax: +39 0118179054

[kit-e.eu](http://kit-e.eu) - [info@kit-e.eu](mailto:info@kit-e.eu)