

A new three-phase Smart Meter for Cloud connection: network 2 architecture and performances

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What is smart metering?

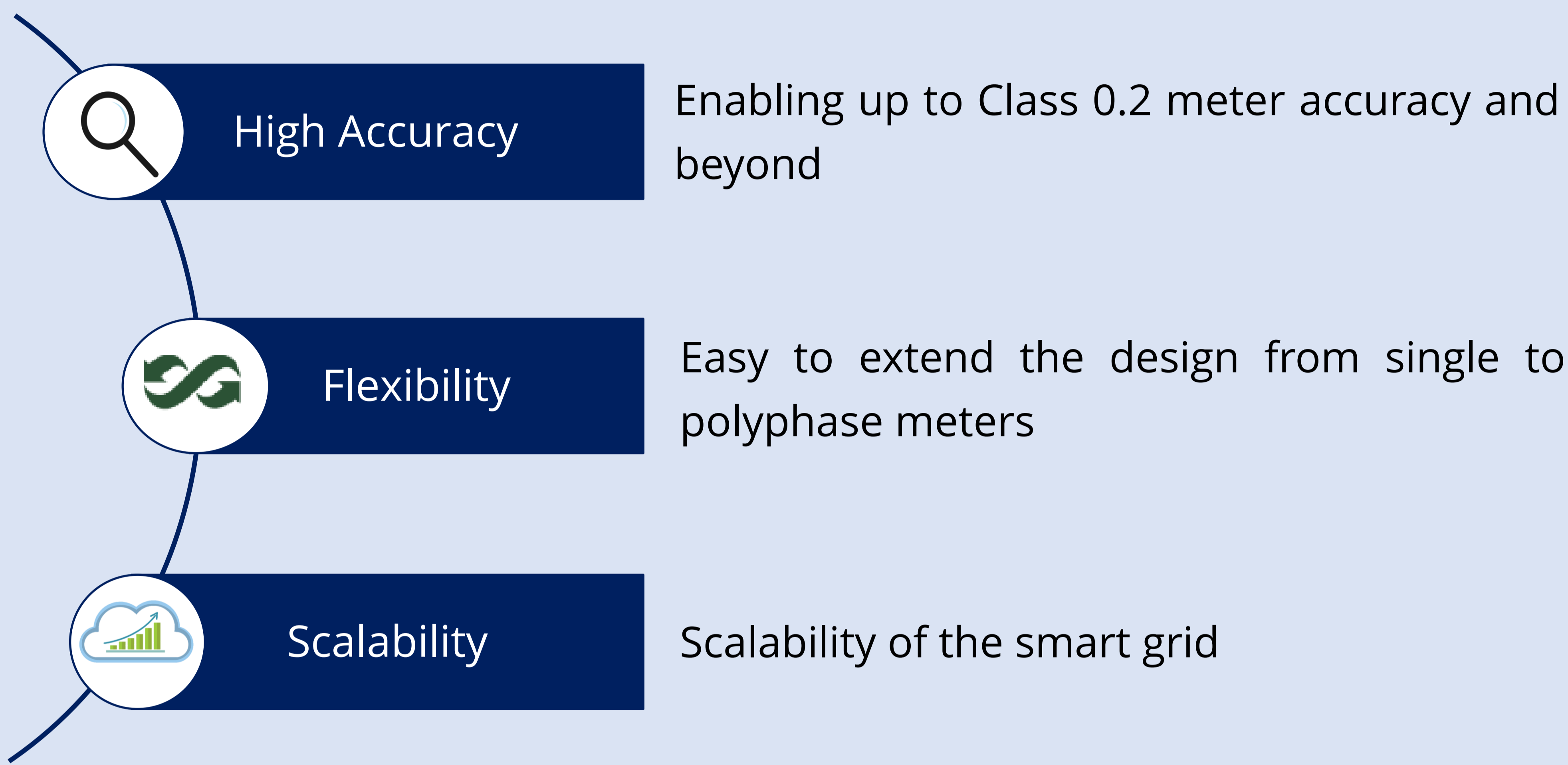
Smart Meter is an energy measurement device that measures the real time consumed energy by a customer.

It provides a two way flow of information between consumers and suppliers providing better controllability and efficiency.

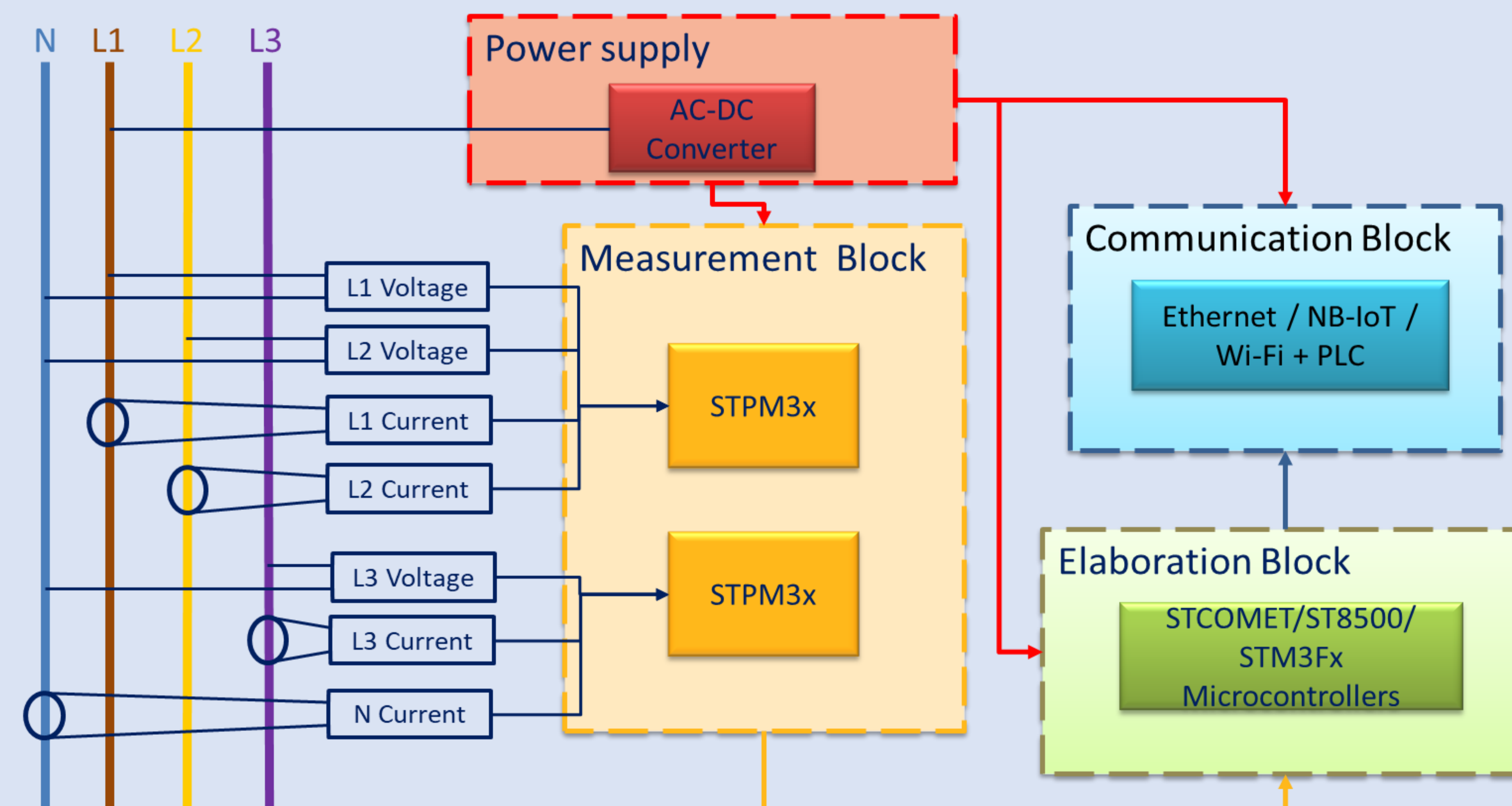
Need for smart metering

With a global shift to less predictable renewable energy sources, utilities companies need more precise data to balance loads on the Smart Grid. At the same time, consumers want greater control over their energy usage. Smart metering system is an advanced, flexible, interoperable, future proofing system that connects all energy market participants such as customers, utilities and regulators.

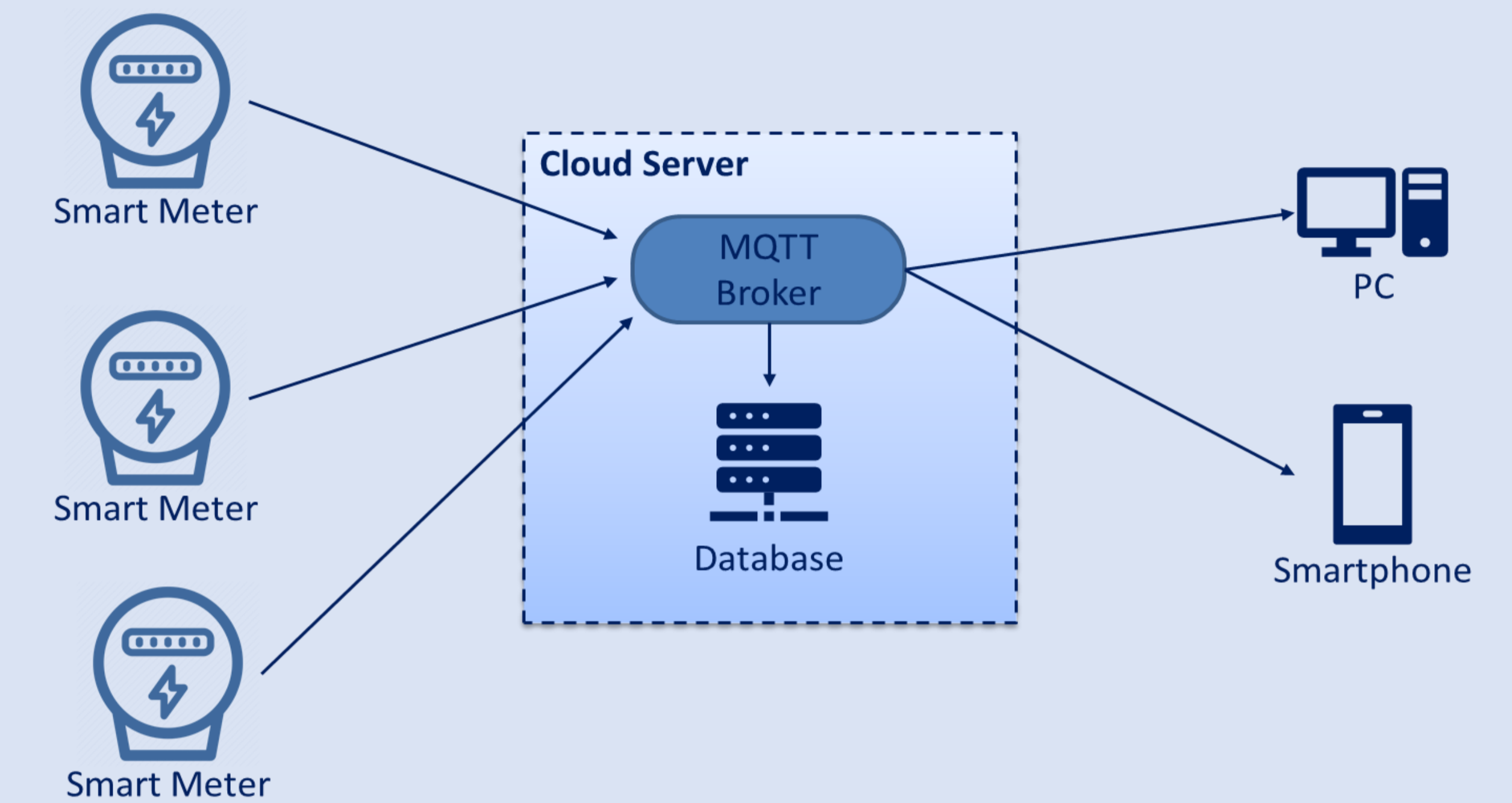
Our technology



We have designed and prototyped different types of IoT smart meters, all equipped with an internet connection to communicate with the server-side of our network infrastructure in order to join the smart grid.



Meter Network



All the smart meters belonging to the network communicate with the cloud through the IoT MQTT protocol.

On the cloud side, data storage takes place, while the display of smart meter data takes place via a WebApp from a mobile device or PC.



Technology readiness level

Our complete smart metering system, i.e. three smart meter prototypes and the network infrastructure, was tested in an industrially relevant environment.