Kamstrup Meter Interface

User engagement in smart metering

By integrating a Zigbee wireless communication module in the meter, you add exploitation opportunities that help reduce energy consumption, give economical benefits, and improve the level of comfort.

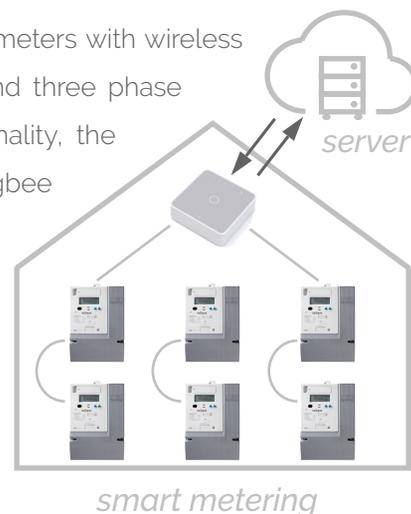Among the exploitation opportunities by the wireless meter interface are:

- Smart metering
- Energy awareness
- Smart home
- Peak shaping

Smart metering

The meter interface from Develco Products equips Kamstrup meters with wireless communication. The module is compatible for both single and three phase meters. In addition to the standard Zigbee metering functionality, the interface module supports a complete KMP protocol via Zigbee tunnel cluster, hence providing extended metering functionality.

Key features are:

- LED and Switch MMI
- Over the air update (OTA)
- Serial interface - KMP protocol
- Zigbee SE and HA protocols

server

smart metering

Energy awareness

Thanks to the connection with Zigbee in-home display, you will gain significant knowledge about your real-time energy consumption.

With this solution you are instantly reminded about your consumption and you can save up to 15% of energy each month.

Smart home

By integrating the wireless communication module in Kamstrup meters, the smart home solution is expanded with energy management functionalities that help to reduce energy consumption. It also allows to integrate renewable energy sources and reduce costs without compromising comfort level.

Having an overview of your energy consumption in your smart phone, tablet or PC allows you to take control and action whenever needed.
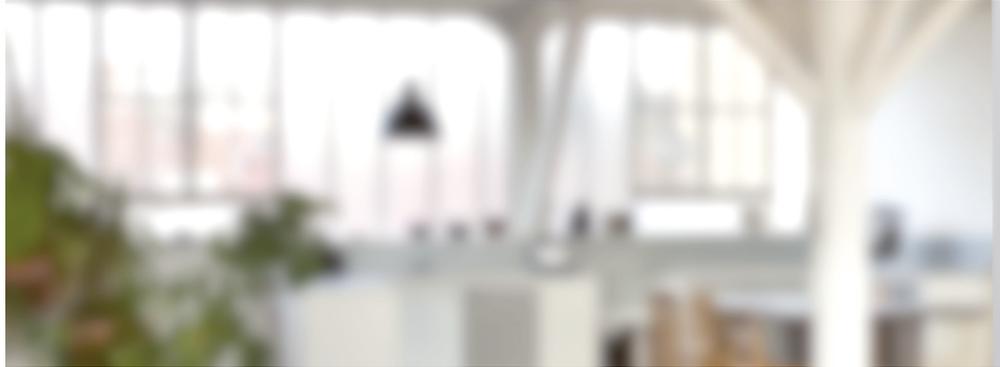

Proved functionality supporting numerous meters

The Kamstrup Meter Interface is available as slide-in module or under-cover module for both Zigbee Smart Energy and Zigbee Home Automation applications. Moreover, it is compatible with OMNIPOWER and generation K and L electricity meters.

The Kamstrup Meter Interface is available in three mechanical versions:

- MEIZx-041: Build-in version for generation K and L meters
- MEIZx-051: CCC module for generation L meters
- MEIZx-061: CCC module for generation M and OMNIPOWER meters

All hardware variants are available in two functional versions:

- MEIZE-0x1: Zigbee Smart Energy PAN Coordinator for In-Home Displays (Zigbee SE 1.1b certified)
- MEIZH-0x1: Zigbee Home Automation meter interface, for connecting with the gateway or Home Automation system. This version is usable for smart home and smart metering

Develco Products for smart home solutions

Develco Products provides all hardware needed for smart home solutions. The key in smart home solutions is the Squid.link Gateway.

Squid.link Gateway

The Squid.link Gateway is an open Linux platform including multiple wireless networks for communication with smart meters, sensors, smart plugs, thermostats etc. The Squid.link Gateway has options for Zigbee, Z-Wave, Wireless M-Bus and WLAN HAN networks.

The gateway includes processor power to implement even very complex local intelligence. The memory options leave room for data storage and logging. Communication with servers and e.g. smart phones can be established via WLAN, Ethernet (to local modem) or Cellular 2G/3G.

Software options

Develco Products provides the Squid.link Gateway with Linux and optionally Java. For application of software, three options are available:

> 1. Squid.link Starter Kit: Complete hardware, software, development tools and documentation package for own software development
> 2. OSGi based middleware via partners, for own high level software development
> 3. Turnkey software solutions from partners

Develco Products provides a range of products for smart home and energy management. For evaluation of the Develco Products' devices, you can purchase an Evaluation Kit which allows you to test the functionality of different wireless products, learn installation, test product performance, and analyze the results. The Evaluation Kit is also available in special Kamstrup edition including a Kamstrup Meter Interface. It is a quick and easy way of getting closer to applications for smart home, energy control, assisted living and home security.

Contact Develco Products sales team for more information.

Kamstrup Meter Interface - Technical specifications

General

Dimensions (W x H)	64 x 42 mm (depending on meter type)
Power supply	Supplied by the meter
Power consumption	0.3 W max
Radio	Sensitivity: -101 dBm @ 1% PER
	Output power: 13 dBm
	Frequency band: 2400 to 2485.5 MHz
	Number of channels: 16
Environment	Operation temperature -10 to +70°C
	Storage temperature: -40 to +85°C

Functions

Metering device	Zigbee HA or SE 1.1.b
Sensitivity range	Indoor: up to 50 m (indoor)
	Outdoor: up to 1600 m (LOS)
Antenna	On-board (PCB)

Communication

OMNIPOWER electricity meters	MEIZE-061: Zigbee SE slide-in module
	MEIZH-061: Zigbee HA slide-in module
Generation L electricity meters	MEIZE-051: Zigbee SE slide-in module
	MEIZH-051: Zigbee HA slide-in module
	MEIZE-041: Zigbee SE under-cover module
	MEIZH-041: Zigbee HA under-cover module

Certifications

Zigbee SE 1.1.b certified

CE, ETSI certified

RoHS compliant according to the EU Directive 2002/95/EC