

Installation and user's guide

Multi-Utility Controller



Quick Guide

Installation

- 1 Multi-Utility Controller module: Mounted in the module area of the electricity meter
Multi-Utility Controller add-on: Mounted together with GSM8i module in the module area of the electricity meter.
Multi-Utility Controller stand-alone: Connected to the power supply.
- 2 When the diode on Multi-Utility Controller emits light, Multi-Utility Controller is ready for use.

Contents

1	Description	3
1.1	Description of Multi-Utility Controller	3
1.2	Application	3
1.3	Preconditions	3
1.4	Module overview	4
1.5	Multi-Utility Controller stand-alone	5
2	Mounting	5
2.1	Mounting order for meter with Multi-Utility Controller	5
2.2	Antenna	6
3	Error detection help	6
4	Ordering of MUC	7
4.1	Ancillary products	7

1 Description

1.1 Description of Multi-Utility Controller

- Wireless reading of water, heat, cooling and gas meters
- Plug-and-play concept without local configuration
- Compact installation where Multi-Utility Controller add-on and the Multi-Utility Controller module are installed in the module area of the electricity meter
- Multi-Utility Controller stand-alone is connected to the power supply.

1.2 Application

Multi-Utility Controller can wirelessly collect data from nearby water and energy meters.

The data collection takes place via Wireless M-Bus, and the communication with the central system depends on the selected MUC solution.

1 The MUC module uses the integrated RF of the meter.

2 MUC add-on uses the GSM module.

3 MUC stand-alone can be delivered either for RF or GSM.

Meter data is saved in the internal data logger of the MUC module and can be read via the central system. Data is logged according to predefined profiles that are adapted to the various meter types, and therefore, no additional configuration is required at the time of installation.

The data logger of the Multi-Utility Controller automatically logs both 15-minute values and hourly values in accordance with preconfigured profiles (see data sheet).

1.3 Preconditions

The Multi-Utility Controller module and Multi-Utility Controller add-on and GSM8i can be mounted in:

Direct Kamstrup electricity meters with integrated RF starting from generation L and K351C. The RF firmware in the L-meter must as a minimum be 04. However, it does not fit in 162L meters, please contact the product manager.

Note that Multi-Utility Controller can read the following meters with Wireless M-Bus modules: MULTICAL® 21, MULTICAL® 302, MULTICAL® 402, MULTICAL® 61, MULTICAL® 62, MULTICAL® 601, MULTICAL® 602, MULTICAL® 801, flowIQ® 3100.

RF Concentrator:

GSM8i RF 3G: All versions

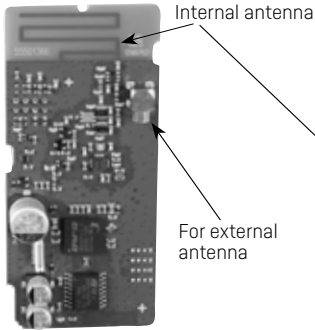
GSM6i/RF: As of concentrator Rev. N1 version 0x2D.

Wireless M-Bus:

Mode C1, 868 MHz.

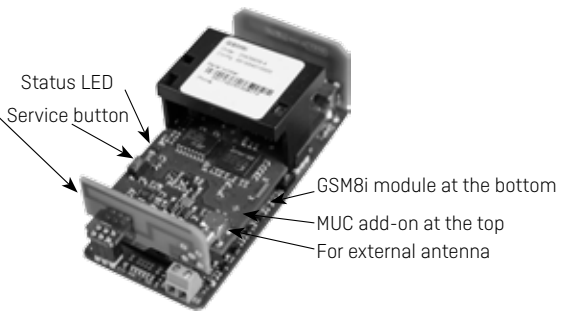
1.4 Module overview

Multi-Utility Controller for RF

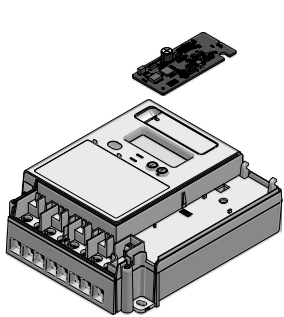


6850071

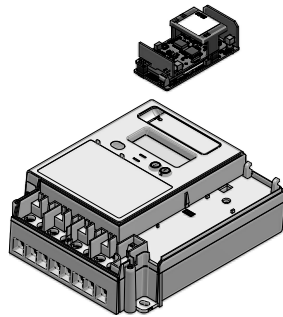
Multi-Utility Controller add-on for GSM8i



6845003
[+ GSM8i module]

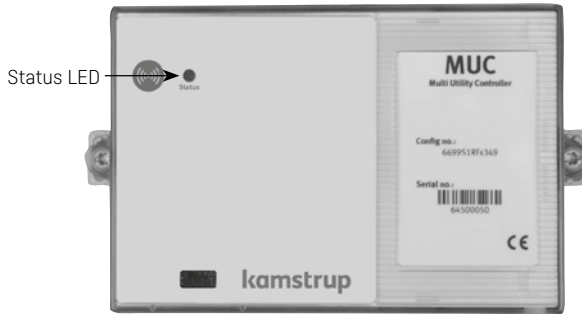


The Multi-Utility Controller module is mounted in the module area.



GSM8i and the Multi-Utility Controller add-on module are mounted in the module area.

1.5 Multi-Utility Controller stand-alone



2 Mounting

Mount the Multi-Utility Controller modules in the meter in the following way:

2.1 Mounting order for meter with Multi-Utility Controller

- 1 Dismount the top cover of the meter.
- 2 Insert Multi-Utility Controller for RF in the meter (please check that the eight module pins are all plugged in).
Insert Multi-Utility Controller for GSM on top of the GSM8i module in the meter (please check that the eight module pins are all plugged in).
- 3 When the diode on Multi-Utility Controller emits light, the module is ready for use.
- 4 Mount the top cover of the meter, and seal the meter.
- 5 Scan or write down the information which the central system uses for pairing Multi-Utility Controller with the meters which it is to read.

This information typically includes:

- The serial number of the electricity meter in which the Multi-Utility Controller module is mounted
- The address or the installation number of the electricity meter
- The meter number of the flow meters which Multi-Utility Controller is to read.

The installer must write down or scan this information when he has installed the Multi-Utility Controller module in the meter. The pairing of the units is subsequently carried out by the central system on the basis of this information (in the central system, this information is called "usage points") – it is not a task of the installer.

At installation, a MULTITERM Pro Wireless M-Bus hand-held terminal can be used to check the signal conditions and to see which meters are within reach.

If the module does not indicate normal operating conditions, see chapter 3, page 6.

2.2 Antenna

Multi-Utility Controller has an integrated antenna, see paragraph 1.4, page 4, which in most cases is sufficient to cover a regular household.

In the cases where Multi-Utility Controller is installed in metal cabinets, an external antenna must be connected.

Connect the external antenna to the connector on the module. Be careful to hear a "click" to ensure that the two connectors are connected correctly.

It is not allowed to use any tools for mounting the antenna connector.

Place the antenna cable inside the plastic frame of the module, and lead the cable out through the cable channel at the bottom of the electricity meter.

If it is required to extend the range, it is possible to use a Radio Link Repeater (order No. 6697041), which in principle is a "wireless antenna". This repeater must be paired with the MUC module by means of a MULTITERM Pro Wireless M-Bus hand-held terminal. Note that only the repeater with ordering number 6697041 works together with Multi-Utility Controller.

3 Error detection help

NOTE! The light emitting diode turns off automatically after 10 minutes.

The light emitting diode does not emit light	The diode emits light when the module is ready for use, and when the communication between the meter and the module is tested. If the diode does not emit light, check the following: 1 Is the meter powered? 2 Is the module correctly mounted, i.e. are all 8 module pins plugged in? 3 Is it an older meter (see 1.3 Preconditions)?
--	--

4 Ordering of MUC

6850071	Multi-Utility Controller module for RF meters
6845003	Multi-Utility Controller add-on module
6699SORF0000	Multi-Utility Controller stand-alone + RF (NET 0)
6699RORF0000	Multi-Utility Controller stand-alone + RF (NET 1)
6699S03G0000	Multi-Utility Controller stand-alone + GSM

4.1 Ancillary products

6697042	MULTITERM Pro Wireless M-Bus hand-held terminal
6697125	Installation Tool, software plug-in for MULTITERM Pro
6697125	DES, Device Exchange System
6697043	Radio Link Repeater
6699448	Mini-Triangle antenna incl. 2.5 m cable

