M-Bus Master MultiPort 250D
M-Bus system for communication with heat, cooling, water, electricity and gas meters

Advanced functionality
The M-Bus Master MultiPort 250D enables you to communicate with heat, cooling, water, electricity and gas meters. The M-Bus master is designed for the connection of both small and large sized M-Bus systems from 1 to 250 meters with M-Bus interface and cable length up to 2800 m. The built-in repeater allows an extension of the M-Bus system up to 1,250 meters with max cable lengths of 14 km, collecting data at a high data speed - and thus operating all M-Bus networks quickly and efficiently.

Flexible operation
Your demand for flexible operation and minimized maintenance is crucial. As MultiPort 250D supports secondary addressing with no meter programming needed, the M-Bus master is a plug and play device easy to install and operate. Installation and analysis work can be done directly from the master’s user-friendly display and six front keys without having to connect a PC. Moreover, the IP67 sealed master is approved resistant to dust, humidity and water which facilitates the highly flexible operation.

Cost-efficient communication
The M-Bus master surveys, detects and reads the meters. The M-Bus master has integrated communication ports for RS-232, RS-485, GSM/GPRS, USB or optical eye which allows the meter to be read from more than one system at a time, and via the built-in web server you will have the configuration and operation confirmed remotely. The advanced functionality and flexible operation minimize the need for maintenance and troubleshooting which qualifies the M-Bus Master MultiPort 250D to be a cost-efficient choice of communication.
M-Bus Master MultiPort 250D
– State-of-the-art M-Bus communication

How to operate the M-Bus Master?

With the M-Bus Master MultiPort 250D you can read all Kamstrup heat, cooling, water, electricity and gas meters with M-Bus interface, and various meter types and brands can be installed and co-exist in the same M-Bus network. The M-Bus Master is designed for connection of up to 250 meters with cable length up to 2800 m. In installations with up to e.g. 50 meters, you will reach 10 km cable length with one single M-Bus Master.

You can use the M-Bus Master as master, repeater or level converter. As master, it is operated via the display and the 6 push buttons on the front panel. The display is designed with an easy-to-use menu to perform scanning, reading and analyzing of the network. Further, the display continuously informs you about the ongoing communication on the M-Bus net.

As repeater, the M-Bus master provides the possibility of extending the network size with up to 1250 meters with a total cable length of 14 km using 4 repeaters in one system. As level converter, one or more of the integrated communication ports are connected to e.g. a reading system, from where the communication is initiated.

The M-Bus Master is standardized according to EN 13757-2 and EN 13757-3 and has an enhanced protection class up to IP67.

How to communicate with the meters?

MultiPort 250D is equipped with 6 communication ports for communication with e.g. remote reading programs, BMS systems and controllers: RS-232, RS-485, USB, optical eye, GPRS and GSM. You can connect more reading devices at the same time e.g. reading PC for billing on USB, hotline support via GSM/GPRS or supervision PC on RS-232. Via the built-in web server, configuration and operation of the Master can be configured and operated remotely.

Primary, secondary, enhanced secondary addressing and wild card search are supported. Due to the integrated collision detection, wild card search is allowed when using secondary and enhanced secondary addressing. When scanning the M-Bus network from the M-Bus master, you can use both primary and secondary scanning. When reading Kamstrup meters and other brands, M-Bus specific data are shown on the display.

When you use primary addressing, each meter needs a unique primary address between 001 and 250. Kamstrup M-Bus modules will automatically use the last 2-3 digits of the meter number as their primary address. Using secondary addressing, the last eight digits of the meter number are used as M-Bus ID number. The secondary address is similar to the customer number which is configurable.

Communication via above ports is transparent and includes collision detection. Communication speeds supported are 300/2400/9600 Baud.
Top flexible communication

You choose how to read your meters.

Example

With 4 repeaters, up to 1250 meters and 14 km cable length

Top flexible cable network

You choose the size of your network, the cable length and the communication speed.

<table>
<thead>
<tr>
<th>Possible cable lengths with meters evenly distributed in the cable network.</th>
<th>Speed/number of meters</th>
<th>10</th>
<th>50</th>
<th>150</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable type 1.5 mm² (12 Ohm/110 nF per km)</td>
<td>300 Baud</td>
<td>10 km</td>
<td>10 km</td>
<td>4.8 km</td>
<td>2.8 km</td>
</tr>
<tr>
<td></td>
<td>2400 Baud</td>
<td>10 km</td>
<td>10 km</td>
<td>4.8 km</td>
<td>2.8 km</td>
</tr>
<tr>
<td></td>
<td>9600 Baud</td>
<td>6.5 km</td>
<td>6.5 km</td>
<td>4.8 km</td>
<td>2.8 km</td>
</tr>
</tbody>
</table>
Kamstrup
- your guarantee for an always better solution

Kamstrup is the world’s leading producer of energy meters and system solutions for consumption measurement.
Our core areas are measurement of heat, cooling, water and electricity. Furthermore, in co-operation with you we develop AMR and service solutions that are customized to your company.
We are represented in more than 60 countries worldwide by Kamstrup sales and subsidiary offices or by our distributors.
All employees work hard to offer your company the very best service and to respond to global market information provided by our trusted partners.
In this way we maintain a strong mutual co-operation.

The Kamstrup brand
- when you demand quality, reliability, innovation and partnership.