

MULTICAL® Compact M-Bus

Remote data acquisition from MULTICAL® Compact

Plug-in module for MULTICAL® Compact

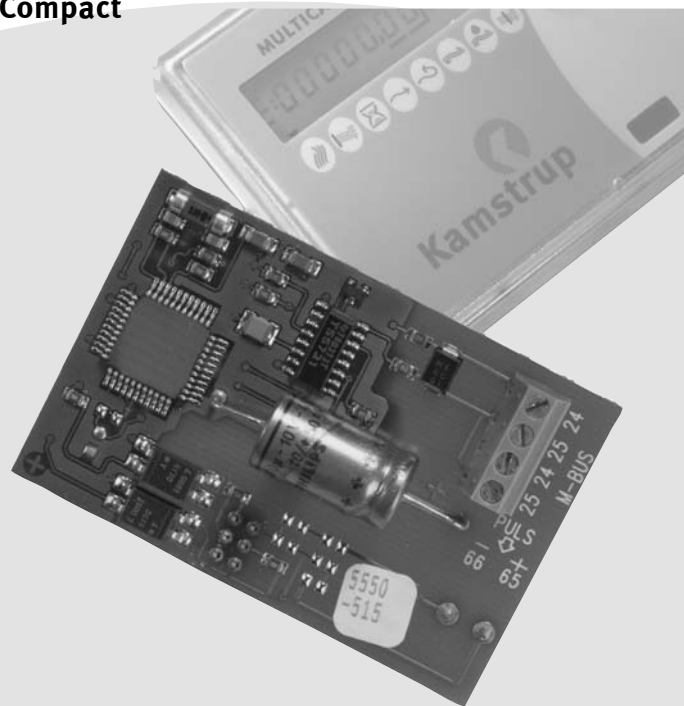
2-wire connection

Supplied via M-Bus Master

Simple and cost-effective reading

2-way communication (300/2400 baud)

Complies with EN 1434-3



Application

The M-Bus Slave is a MULTICAL® Compact module, which is easy to build into the meter. The M-Bus Slave module is mounted into the bottom of the MULTICAL® Compact and can be retrofitted. Once the M-Bus Slave is installed the meter data can be read via the M-Bus network.

M-Bus is a local network which makes it possible to communicate with and read energy meters from a centrally placed M-Bus Master. A network can consist of up to 250 M-Bus Slaves according to requirement.

M-Bus Slaves are supplied via the M-Bus network making it completely independent on MULTICAL® Compact's own supply.

Two-way communication between the M-Bus and the energy meter is made via opto-couplers ensuring galvanic separation between M-Bus and meter.

The M-Bus Slave automatically acquires data from the energy meter every 12th hour or after reset/start-up.

The reading address which activates the M-Bus slave, consists of the last 3-8 digits in MULTICAL® Compact's customer ID number. Thus, no control of the M-Bus Slaves' individual addresses, or programming is necessary.

The address is easily changed by using Kamstrup's hand-terminal MULTITERM or the Pc program of METERTOOL.



Kamstrup A/S
Industrivej 28, Stilling
DK-8660 Skanderborg
TEL: +45 89 93 10 00
FAX: +45 89 93 10 01
info@kamstrup.com
www.kamstrup.com

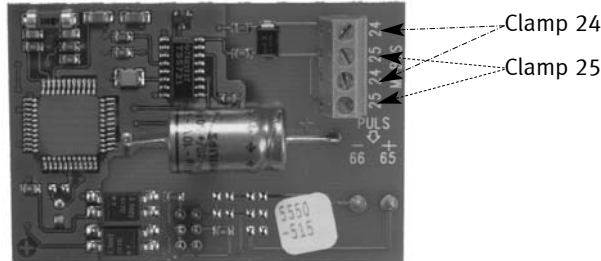
Accessible data

Following MULTICAL® Compact data can be read by the M-Bus Slave module:

Customer ID number, TAR2, TL2, TAR3, TL3, Prog.no., Config.no., Date, Energy, Volume, Hour counter, t_{flow} , t_{return} , Δt , Effect, Flow, Peak, Info.code.

Deadline data: Customer ID no., Date read, Energy, Volume, TAR1, TAR3, Peak effect/Flow peak.

Connection diagram



Technical data

Electrical data

Supply	Via the M-Bus
Voltage supply	21-42 VDC
Power consumption	1,5 mA (1 unit load)
R_{in}/C_{in}	410 Ω / 0.5 nF
Reading frequency	Min. 15 seconds between 2 readings
Data updating	Every 12th hour automatically
Typical response time	< 1 sec. at 300 baud
Adress field	001 - 250
Communication	300/2400 baud, 1 start bit, 8 databits, 1 parity bit, 1 stop bit
Cable length	Up to 1800 m
R_{max}/C_{max}	29 Ω /180 nF
Cross section (recomm.)	0.8 mm ² , twisted pair

Mechanical data

Dimensions, BxH	63 x 42 mm
Ambient temperature	0..55°C
Mounting	To be built into MULTICAL® Compact

Standards/markings/approvals

Complies with requirements stated in	CEN/TC 176, EN1434-3
CE-marking	Complies with requirements for MULTICAL® Compact
Signal quality	ISO 7480, section 3.6.

Order specification

Description	Type No.
M-Bus Slave module for MULTICAL® Compact	66-0S-000-100
M-Bus Master without display	66-98-1XX-XXX
M-Bus Master with display	66-98-AXX-XXX
M-Bus Cascade module	66-98-001-100
PcM-Bus software Win98/2000/XP SP1	S75-30-007
RS232 cable	66-99-106

Contact Kamstrup A/S for computer requirements.

Authorized distributor

Please contact Kamstrup A/S for information about your nearest distributor.