# M-Bus Digital Master Series

High end M-Bus master interface

For up to 250 slaves

Sophisticated signal processing

Transmission rate up to 38400 baud

RS232, RS485 or current loop options

Bus overcurrent and lightning protection

Repeater option for network extension



The family of digital M-Bus master interfaces is ideally suited for large M-Bus installations with up to 250 slaves. Due to the modular design models with RS232, RS485 or current loop physical interface are available. Thus the series provides a suitable solution for different host controller systems.

With one member of the family, the DR007, nearly unlimited network extensions and unrestricted number of slaves are possible. It offers a real repeater function, which allows to put devices in chain without signal distortion.

The optional internal or external modem allows scanning of all measured data from any location and without need of a local PC.





## Unbeaten and flexible:

# **Digital Master family**



# **Function of the Digital-Master**

The devices in the digital master series are M-Bus master interfaces for networks with up to 120 or 250 slaves. Short circuit protection, collision detection, control and correction of bit times are performed by a signal processor. The high transmission rate of maximum 38400 baud also allows time-critical applications with the M-Bus system. A number of different LED indicate the state of the M-Bus network and data communications.

The range offers various interfaces:

RS232 (standard), RS485 (large distance between control computer and digital master), Current Loop (20 mA/TTY) and internal or external modem.

#### **Available versions**

1. RS232C, 250 unit loads DR003 RS232C, 120 unit loads DR004 2. RS485, 250 unit loads DR005

Art.-No.

RS485, 120 unitloads DR006

3. Repeater for bus extension DR007 4. RS232C and integrated modem DR009

5. Current Loop active DR011A Current Loop passive DR011P

Up to 250 unit loads can be connected to the devices from no. 3 to 5.

#### **Technical data**

42V DC Operating voltage: Power input: max. 25 W

M-Bus voltage (without load): 40V

Max. M-Bus quiescent current: 375mA (250 unit loads)

180mA (120 unit loads)

Internal bus resistance: approx.  $10\Omega$ 

Overcurrent threshold: 500mA (250 unit loads)

250mA (120 unit loads)

Transmission speed RS232C: 300 .. 38400 baud

300 .. 9600 baud RS485: Current Loop: 300 .. 9600 baud Int. Modem: 300 .. 2400 baud Galvanic insulation to M-Bus

Echo supression Overcurrent switch off

Collision detect with break-signal

Bit-recovery

Accessories

M-Bus readout software:

M-Bus modem for level converter

Look@M-Bus for Windows95/98/NT

LocalService@M-Bus (time module)

M-Bus OLE Server for Windows95/98/NT

Temperature range: 0 .. 55 °C

Housing:

anthracite plastic, protection type IP52

 $H \times W \times D = 200 \times 240 \times 85$ 

wall mounted

Power supply unit: 230V~input, 42VDC output

alternatively plug-in or wall mounted with fix connection

### Order information

Art. No.. see above (available versions)

**Delivery contains:** 

plug-in power supplyl 42VDC Also available on request:

add -WNT to Art. No. wall mounted power supply 42VDC:

Meß- und Kommunikationstechnik GmbH Stettiner Str. 38 Tel.: 05251 / 1769-0

D-33106 Paderborn Fax.: 05251 / 1769-20 EMail: info@padmess.de www.padmess.de

Art. No. MOD003

Art. No. SW006

Art. No. SW006Z

Art. No. SW005



Reinecke Elektronikentwicklung und Layout GmbH Stettiner Str. 38 Tel.: 05251 / 1767-0 D-33106 Paderborn Fax.: 05251 / 1767-20 www.relay.de EMail: info@relay.de