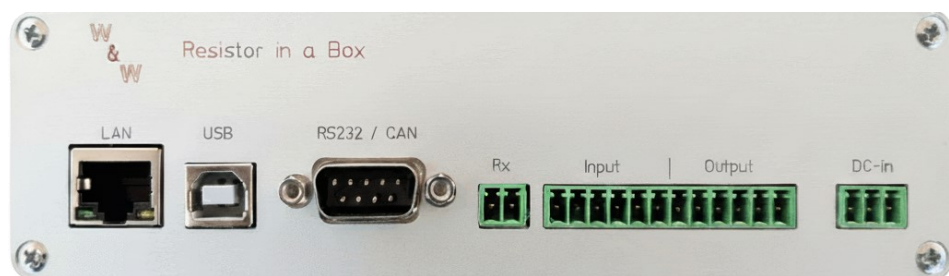


MR01 Resistor in a Box

MR01 Programmable Resistance Decade



- Simulation of "real" ohmic resistors
- Independent, potential-free channels
- Resistance range 0-2.666665 M Ω , $R=\infty$, resolution 1 Ω
- Programming via LAN, RS232, USB, CAN
- Maximum power dissipation 1W per decade resistor
- Maximum resistance value after power on
- Seamless switching
- Storage and output of resistance sequences
- Digital I/O for function control and free use
- Suitable for DIN rail mounting or as a tabletop device

Product solutions by **W&W**
From practice ... for practice!

Technical data: **MR01- Resistor in a Box**



General:

The MR01 module is a single-channel, programmable resistance decade. In addition to its use in laboratories, the module is ideally suited for simulating real resistance values within automated environments. Application possibilities include the simulation of resistance-based sensors (PTC, NTC) as well as the variable configuration of inputs and outputs (Pull-Up, Pull-Down) for electronic devices. The channel consists of switched precision resistors that can be bridged via a relay contact, allowing the resistance values to be programmed accordingly. At the end of the resistance chain, there is an additional normally open contact that can be programmed to set the state to open ($R \rightarrow \infty$). After powering on the MR01, the state is set to open. Up to 256 resistance values can be stored in the internal memory. Output control is managed through the digital inputs.

The MR01 can be controlled via LAN, USB, RS232, or CAN.

Form Factor/Size:	Aluminum housing WxHxD 165x46x125 mm
Power Supply:	9...38V DC / 400mA
Operating Temperature:	10 – 40 °C
Connections:	Resistance channel 4 Digital inputs (24V), 4 Digital outputs (24V) Ethernet 10/100Mbit (RJ45), RS232/CAN (9-pin DSub) USB 2.0 (Type B) Virtual Com Port (VCP)
Potential Isolation:	Max 500 VDC

Adjustable Resistance

Range:	2,666,665 Ω , ∞ (open)
Resolution:	1 Ω
Accuracy:	1 $\Omega \leq 12.5\%$ 2-19 $\Omega \leq 10.0\%$ 0-199 $\Omega \leq 3.0\%$ $R \geq 200 \Omega \leq 1.0\%$ $R \geq 8000 \Omega \leq 0.1\%$

Resistance Data

Max. Power per Resistor:	1W
Max. Permissible Voltage:	60 DC
Max. Permissible Current:	Dependent on the power dissipation of the sum of all active individual resistors, max. 1 A

Contact Data

Contact Lifespan:	1000 x 10 ⁶ cycles at low load (<10mA)
Response and Fall Times:	< 1,0ms (including bounce time)
Max. Current:	1A (static and switching current)

Digital I/O

Inputs:	Low-Pegel: < 2V; High-Pegel: > 22V
Outputs:	Supply Voltage: 8 – 28V DC Max. Output Current: 500mA