

M610 Analogue outputs module



Summary

The M610 analogue output module is a microprocessor-controlled, communicative module containing 8 analogue outputs 0..10 V. The module uses Modbus RTU on a RS485 bus for communication, and can be easily integrated in a variety of supervision and control systems.

Applications

- HVAC and industrial control systems – analogue signals output, VAV box control etc.

Functions

The outputs of the module are controlled via the communication bus and can be used as eight independent 0...10V voltage outputs. When using 3-wire connection, connect COM to the G0 potential. The module may be powered from the same source as the peripherals.

The module communicates by means of a RS485 data bus. The communication protocol ensures smooth and easy integration in a number of control and data acquisition systems. The Modbus register table is available on demand.

Removable connectors are used for signals and data line so that mounting is fast and easy. The module can be mounted on a standard DIN rail.

The communication circuits are protected against overvoltage. If the module is terminating the communication bus, i.e. it is the last in line, a terminating 120 Ω resistor may be switched on by short-circuiting of the BUS END jumpers. Two LEDs located inside of the housing enable fast diagnostics – power up and communication.

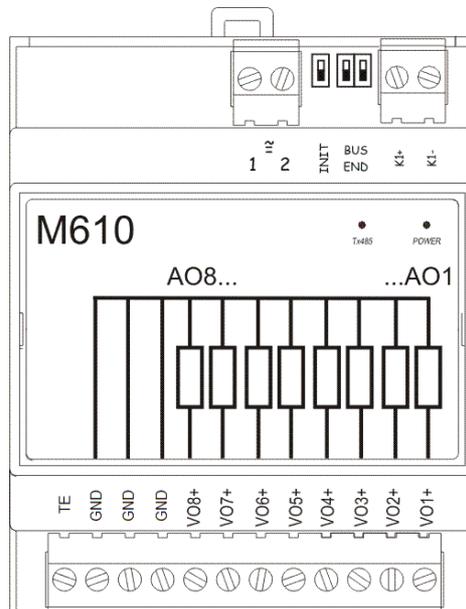
See *domat - Technical application notes* for connection examples.

All the settings are backed up in a EEPROM chip. The module is equipped with a watchdog circuit and the communication part is galvanically separated.

Technical data

Supply voltage	10 V ÷ 35 V DC, 14 V ÷ 24 V AC
Consumption	2000 mW
Working temperature of the module	0 ÷ 70°C
Communication	RS485, 1200 ... 19200 bit/s
Max. bus length	1200m
Max. number of modules on the bus	256
Number of analog outputs	8
Output range	0...10 V DC
Effective resolution	12 bit
Output load	10kΩ, max. current 10mA
Accuracy	0,3%
Max. offset	100 mV
Dimensions	see below

Terminals



Marking	Description
VO1+ to VO8+	„+“ voltage output terminals
GND	ground
1, 2	power, any polarity
K1+, K1-	communication bus
TE	technical earth

BUS END : terminates the RS485 bus
 INIT: if ON, sets default communication parameters (9600 bps, address 1) after module restart

Dimensions

