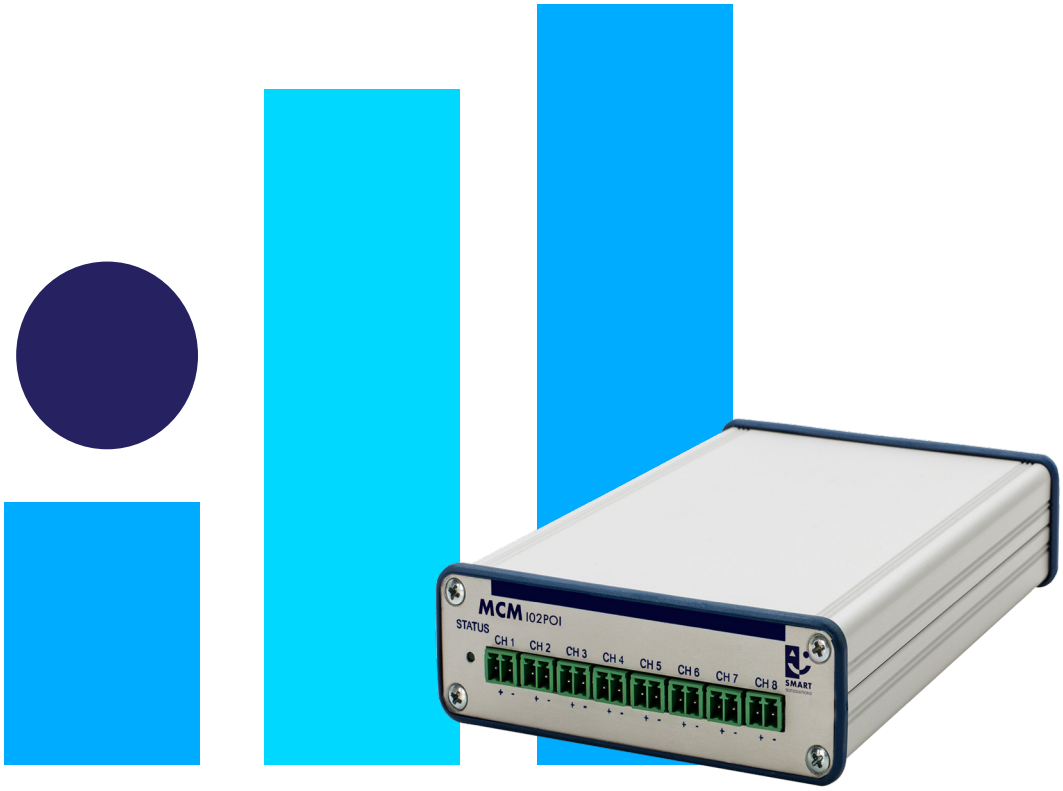
PRODUCT DIVISION MODULAR
MULTICHANNEL I/O-MODULES

SMART
TESTSOLUTIONS

PRELIMINARY

POWER ELECTRONICS FOR SOLENOID COILS

MCM-I02POI



BE SMARTER

- Two independent power channels for the operation of solenoid coils (valves, solenoids, etc.).
- Galvanic isolation of the power stage from the digital electronics.
- Configuration of the module via CAN bus, Ethernet (via Maincontrol).
- The valve current is triggered either via CAN bus or digital-in signal.
- Mode switching: Current-controlled operation/PWM-controlled operation..
- Current ranges for pull-in and holding current 0.5 - 25 A, resolution 100 mA.
- Pull-in current duration 0.5 - 20 ms, resolution 50 µs.
- Duty cycle 1-2000 ms, resolution 0.1 ms.
- Quick cancellation of the magnetic energy at the end of energisation.
- Supply of the power channels via external connection for 0-36 V U_BATT / constant.

PRODUCT DEVISION MODULAR MULTICHANNEL I/O-MODULES

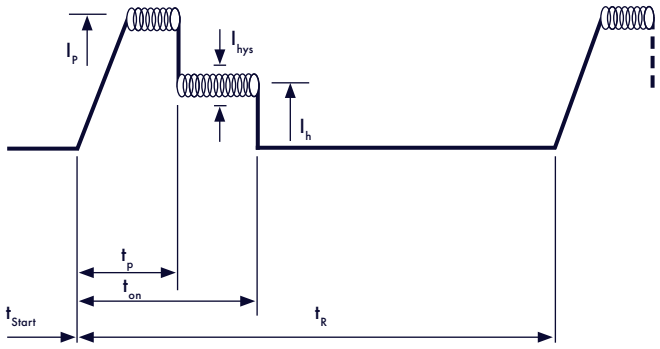
SMART TESTSOLUTIONS

Technical Data	MCM-I02POI
Number of channels	2
Number of inputs	4 analogue inputs per channel with 0-5V
Output rate per channel	Typically 1 kSps
Mechanics, optionally available variants	Desktop housing 'Caseline', alternatively 19' rack mounting, 3U (128.4 mm), 4HP (20.32 mm), t = 100 mm
Internal connection type 19' module	MCM-businterface
Supply voltage for 19' module	3.3 V ± 0.2 V / 5 ± 0.2 V
Supply voltage for desktop housing	10-32V
Permanent insulation voltage (channel to channel)	Max. 800 V_{DC}
Continuous insulation voltage (channel to earth)	Max. 800 V_{DC}
Operating temperature	-20 °C to +85 °C
Storage temperature	-40 °C to +105 °C
Relative humidity	20 % to 85 %
Protection class	IP20 according to EN60529

Application Areas

The MCM-I02POI module is ideal for operating solenoid coils in solenoid valves, linear solenoids and other electromagnetic actuators that are to be operated with optimised performance. Both pulsed (PWM) and regulated energisation is possible.
To switch on the actuator, a pull-in current phase is activated first, which can be parameterised in terms of current level and duration. This is followed by the holding current phase, which can also be parameterised or optionally controlled via an externally supplied digital signal. The module has four analogue inputs that enable resistive sensor signals to be read in.
The module is optimally equipped for use in harsh environments. Areas of application include test benches, rapid prototyping applications and HIL systems.

Current Curve and Configurable Variables



Ordering Information

- MCM-I02POI, Art.-No. 982-160041
  Scope of delivery 19' plug-in module:
  Assembly with terminal connector
- MCM-I02POI as Caseline, Art.-No. 982-180009
  Scope of delivery:
  Module in desktop housing with plug-in power supply unit and terminal connector
- Optional Accessory Items:
  MCM-BaseRack, Art.-No. 982-160010
  MCM-BaseTable Small, Art.-No. 982-160013
  Connector set on wiring harness side

- **COMPACT DESIGN**
- **CASCADABLE**
- **CONTROLLABLE VIA CAN**

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