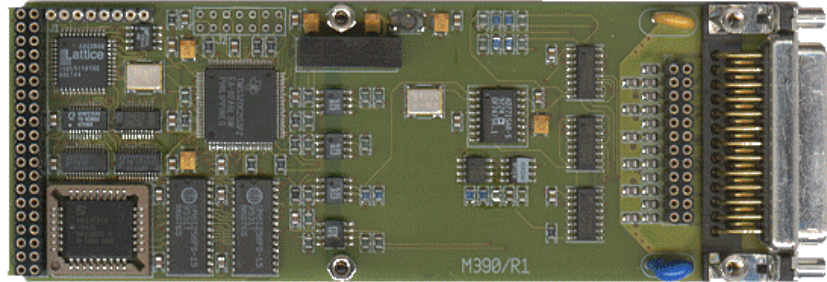


## M390

# 6-Channel RTD Measurement M-module



The M390 is a RTD Measurement M-module featuring six 2-, 3-, or 4-wire high accuracy RTD measurements channels. The M390 is available in four versions:

- PT100 measurement
- PT200 measurement
- PT500 measurement
- PT1000 measurement

Data acquisition is performed by an embedded DSP, transparent for the user, and the conversion result is stored in dual-ported memory. Conversion data can be stored in four different, and per channel selectable, data formats (Celsius, Fahrenheit, Kelvin and Ohms).

Each channel features upper- and lower-alarm levels. If the input goes beyond this range, an interrupt to the host can be issued. The acquisition time is 133 milliseconds for one channel. For each additional enabled channel, 66 milliseconds must be added.

The M390 features autocalibration and optical isolation.

### Features:

- > Supports PT100, PT200, PT500 or PT1000 sensors
- > Supports two-, three-, and four wire RTD devices
- > Internal 16-bit measurement
- > PT100 linearization (IEC751-1983, DIN43760-1980, JIS C1604-1989)
- > Programmable min/max alarms
- > Autocalibrating, no potentiometers
- > Optical isolation
- > Measurement Range: -2000C to +8500C
- > Update rate up to 7.5Hz
- > Identification EEPROM

## M-module Compliancy

- \* A08/D16 (8-bit address and 16-bit data)
- \* INTA (software-end-of-interrupt)
- \* IDENT (identification EEPROM)

## Measurement

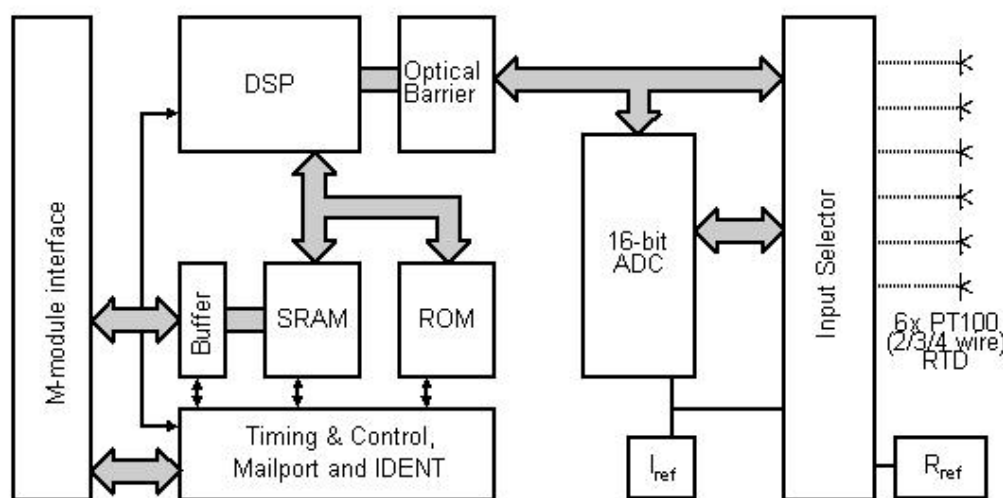
- \* Six RTD channels available
- \* Two-, three-, and four-wire RTD devices are supported
- \* RTD inputs are optically isolated from the system
- \* Excitation current: PT100: 1mA; PT200: 500 $\mu$ A; PT500: 200 $\mu$ A; PT1000: 100 $\mu$ A

## RTD Inputs

- \* Six operational channels available at any time
- \* Output for each enabled channel is updated continuously
- \* Upper- and lower alarm limits for each channel (with optional interrupt)
- \* 16-bit resolution
- \* PT100 linearization according to: IEC751-1983; DIN43760-1980; JIS C1604-1989

## Ordering Information

- \* **M390/T01** 24-channel PT100 precision measurement
- \* **M390/T02** 24-channel PT200 precision measurement
- \* **M390/T03** 24-channel PT500 precision measurement
- \* **M390/T04** 24-channel PT1000 precision measurement
- \* **M390/SW** APIS based software
- \* **M390/MAN** manual on paper



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