Intelligent Measurement Moduls MM-232.XX

Highlights
- •Analog Inputs
- •Digital Inputs / Outputs
- •Frequency Inputs
- •Counter Inputs
- •Data Transfer with ASCII-Commands

General

The MM-232.XX series modules are complete sensor to computer signal conditioners. Each module is a multi channel data acquisition system.

The module convert analog and digital signals to digital data to be transmitted to the computer via RS232.

The MM-232.XX series are easy to use. You don't need engineering experience in complicated data acquisition hardware. This modular approach to data acquisition is extremely flexible, easy to use and cost effective.

Applications
- Product Testing
- Portable Data Acquisition Systems
- Interfaces with modems

Communication
RS 232
Baud Rate 9600
1 Startbit, 8 Data Bits, 1 Stop Bit
CTS and/or DTR can be used as power supply (+)

Function

The module can simply connected directly to a RS232 interface of a standard computer. The supply voltage for the modul is provided by the RS232 interface. In addition an external power supply of 7 to 16 VDC can be used.

All moduls can easy communicate with the computer about simply ASCII-commands. The MM-232.XX series uses a simple command/response protocol for communication. A module must be interrogated by the host to obtain data. A module can never initiate a command sequence.

A command is initiated with a command prompt, a dollar sign ($) and a command consisting of 3 ASCII characters. The response are the datas requested by the command. For better understanding a disk is included with programming samples.

Ordering Information

Ordering Number	Features
MM-232.20	4 Analog Inputs 2 Digital Inputs 2 Digital Outputs
MM-232.21	4 Frequency Inputs 2 Digital Inputs 2 Digital Outputs
MM-232.22	6 Digital Inputs 2 Digital Outputs
MM-232.23	4 Counter Inputs 2 Digital Inputs 2 Digital Outputs
MM-232.24	1 Up/Down Counter 2 Digital Inputs 2 Digital Outputs

Technical Specifications	
Analog Inputs	
Resolution	: 11 Bit
Settling Time	: 300 ms
Accuracy	: <0,2 %
Input Voltage	: 0 - 5 V/DC
Input Resistance	: >100 k
Digital Inputs	
Input Voltage	: 0 - 5 V
Optional	: 0 - 24 V
Input Resistance	: 10 kΩ
Digital Output	: Open-Collector
Output Voltage	: max. 30 V
Output Current	: max. 250 mA
Event Counter	: 16 Bit
Input Voltage	: 0 - 5 V
Counter Frequency	: max. 50 Hz
UP/Down Counter	: 16 Bit
Input Voltage	: 0 - 5 V
Counter Frequency	: max. 2kHz
	: (Without Data Transfer)
Frequency Inputs	
Input Frequency	: 0.1, 1, 10 kHz
Input Voltage	: 0 - 5 V
Communication Data	: 9600,N,8,1
Supply Voltage	: 8 - 16 V/DC
Supply Current	: 3,5 mA