

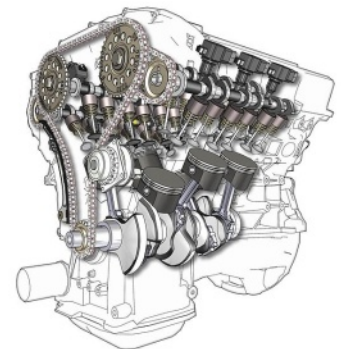


## Modular Control System Data Acquisition System BiSS/SSI

The Data Acquisition System of the Robot Makers GmbH enables **synchronous** and **decentralized** measuring with a variety of sensor systems at **high measuring frequencies**. The **digital BiSS/SSI interface** enables a **robust data transmission** as well as the acquisition of **different physical parameters** by using sensors or adapters. Thus, the Data Acquisition System is predestined for use on **inspection and test rigs** where **rapidly occurring processes** have to be recorded. This applies, for example, at test rigs for the **optimization of combustion engines**.

The **process data** of the sensors are read in **parallel and hardware-supported** by a powerful FPGA. On request, an **application-oriented data pre-processing** like **scaling and filtering** via software or hardware can be realized. The **data output** is based on the **real-time capable EtherCAT slave interface**, which is also implemented in hardware. Therefore, high measuring speeds are possible and the data can be made accessible in the whole network.

The Data Acquisition System can be also used as a **gateway between SSI/BiSS and EtherCAT** or as a **Data Logging System**, too.



Further interface-configurations, plugs or housings are available on request.

### Technical Data

Attributes	RM-MCS-MEA-BOX
Processor	FPGA with Nios II Processor (Altera)
Hardware functions (FPGA)	BiSS/SSI Master, EtherCAT
Fieldbus interface / output frequency	EtherCAT Slave / 1 kHz
Nominal voltage / operating voltage	24 V / 12 V - 42 V
Interface sensor	up to 8x BiSS or SSI (user-configurable)
Import clock sensor	up to 10 Mbps (user-configurable)
Process data resolution sensor	up to 32 bit (user-configurable) (64 bit on request)
Power supply sensor	5 V (optional 12 V), max. 300 mA per Sensor
Housing / protection	Aluminium box / IP 65
Dimensions / weight	259 mm x 128 mm x 90 mm / ~2 kg

### Model

### Description

RM-MCS-MEA-BOX-002	Data Acquisition System, aluminium box, 4x SSI
RM-MCS-MEA-BOX-012	Data Acquisition System, aluminium box, 8x BiSS/SSI

technical changes reserved