

Laser Measurement Interface LMI 200



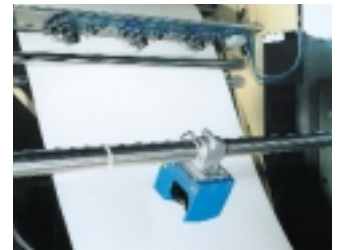
Evaluation unit for the realization of LMS laser scanner measurement tasks



Measurement of unit loads



Positioning



Process automation

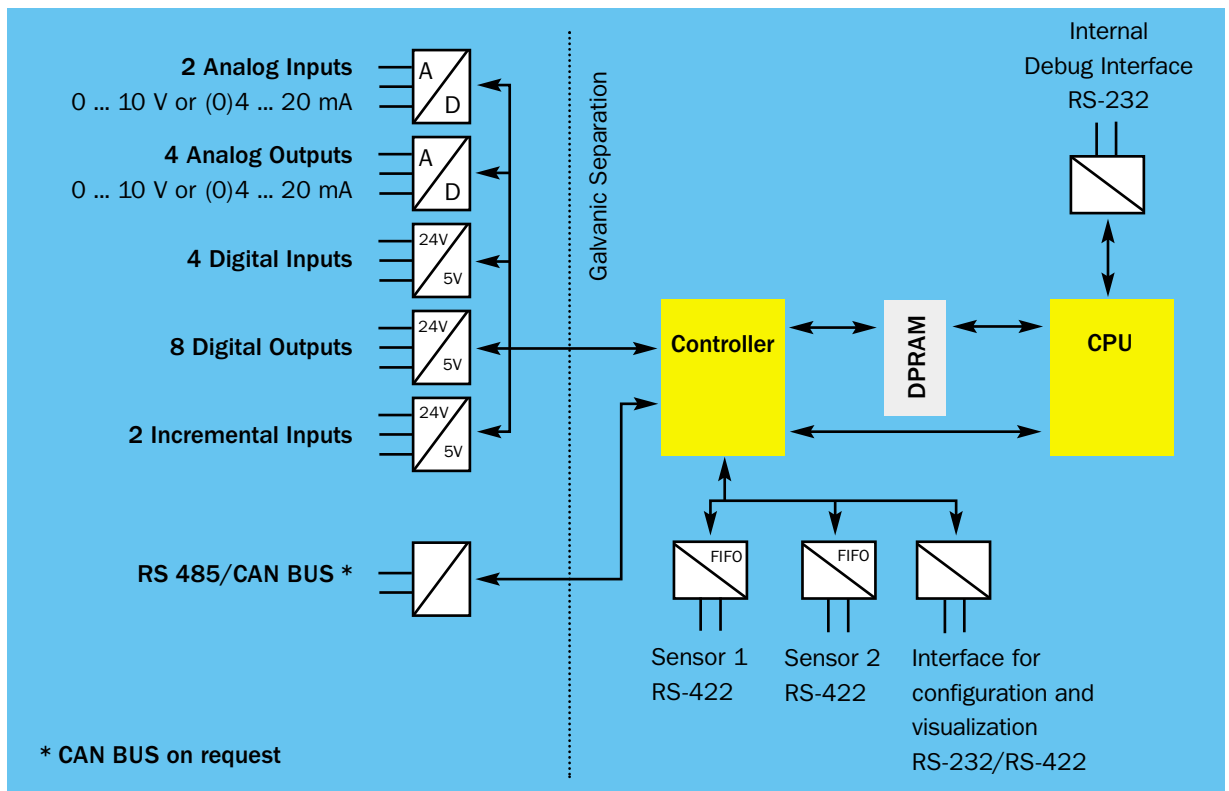
Customer specific measurement functions can be carried out quickly, efficiently and therefore cost-effectively with the help of the evaluation unit LMI 200. Application specific process data can be directly processed via the LMI's digital and analog I/O's. Real time data processing with up to two laser scanners is possible. Via a RS 485 interface or a CAN bus (on request) it is possible to communicate with a host computer.

For the programming of the evaluation unit there is a RS 232/RS 422 interface available.

The programming language is C++ on a standard PC. The program will be downloaded in the LMI's FLASH PROM and can be debugged via another RS 232 port. The Laser Measurement Software Tool **MST 200** with its library of measurement and communication functions is already included in the components supplied. This library includes about 70-80% of the software expense for customized measurement applications.

Drivers for real-time data communication as well as functions for front end processing of real-time sensor measurement data are already implemented. With the use of the LMI 200 together with its software library MST 200 it is possible to save up to 80% of the development costs for the realization of measurement applications with LMS laser scanners.

SICK



Schematic diagram LMI 200

Technical Data:

- Controller for sensor communication and preprocessing measurement data; software integrated by SICK
→ Siemens C167
- CPU for processing application specific data; application specific programming by the customer, SICK library of measurement functions MST 200 included
→ Intel i960Jx 32Bit RISC processor
- Interface
 - 2 RS 422 LMS sensor interface
 - 1 RS 232/RS 422 (configurable) interface for configuration and visualisation
 - 1 RS 232 interface (internal CPU debug interface)
 - 1 RS 485 interface, 1 CAN Bus (on request)
- Inputs
 - 4 digital inputs (24 V)
 - 2 analog inputs (0..10 V or (0)4..20 mA, configurable)
 - 2 pairs of incremental inputs
- Outputs
 - 8 digital outputs (24 V, 200 mA)
 - 4 analog outputs (0..10 V or (0)4..20 mA, configurable)

System requirements for development PC:

- Pentium 100 MHz/16 MB RAM
- Operating System Windows 95/Windows NT
- Laser Measurement Software Library MST 200 (included in components supplied, see SICK Product Information)
- C++ Crosscompiler and Debugger for Intel i960Jx processor