Fail-safe signal acquisition in the field

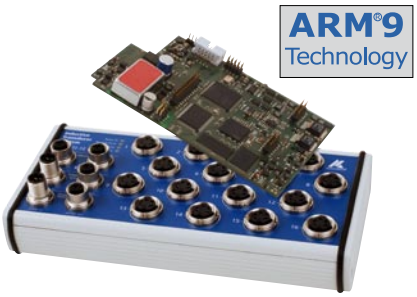
with intelligent Ethernet I/O modules

IP 65, - 40°C to + 85°C

www.addi-data.com

ADDI-DATA®

Effective protection against vibrations, dirt and extreme temperatures



If you use I/O modules for MSR-tasks, you must be sure that they are suited to the direct use at machines. Peak currents, vibrations, dirt and extreme temperatures belong to every day stress, to which the decentral solutions are exposed. Therefore we have protected our I/O modules carefully:

- Robust metal housing
- Extended temperature range – 40°C to + 85 °C
- Degree of protection IP 65, i.e. against dust and water jets
- Optical isolation, protection against short-circuits and voltage reversal
- Solid standard M12 or M23 screw connectors

Intelligent - Flexible - Synchronous

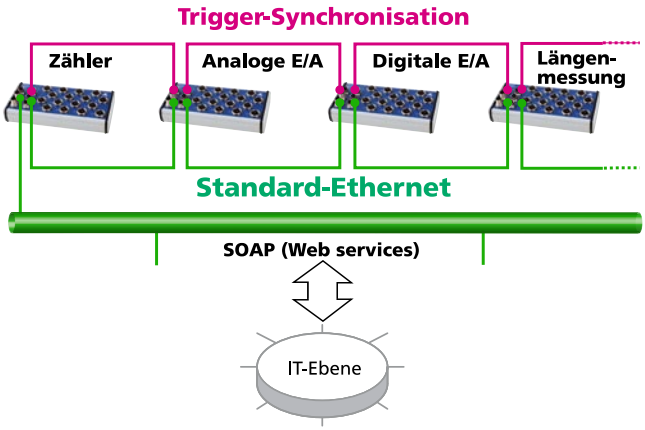
With the new intelligent Ethernet E/A modules you can acquire and process distributed I/O signals directly at production machines in rough environment. Thanks to the degree of protection IP 65, the extended temperature range and the protective circuitries you can save the costs of expensive switching cabinets.

Intelligence through ARM®9 technology

With the Ethernet I/O modules you reduce the signal processing ways: they have their own intelligence. Equipped with ARM®9 technology, the modules allow you to preprocess the acquired measurement data directly at the production machine. i.e. you can realize different mathematical calculations instantly, e.g the evaluation of minimum, maximum and average value.

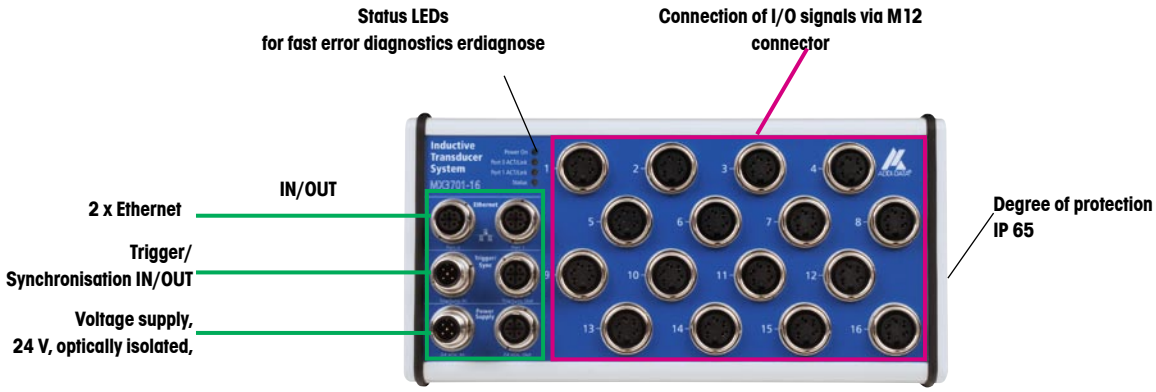
Flexibility and control of time sequences

With the Ethernet switch you can cascade several I/O modules. Furthermore, you can synchronise several modules in the µs range because they carry the synchronisation signal to the outside of the Ethernet network.
Your advantage: By combining of different module types you can compose your optimal measurement and control system. Special solutions are not needed anymore because you can realize multi-channel, synchronous and dynamic measurement, based on standard Ethernet.



Save time during construction and commissioning of a distributed system

The new Internet technologies are implemented in the I/O modules (web services, e.g. XML-data format and SOAP protocol, embedded webserver for configuration, etc.). In this way you reduce time and costs when constructing and commissioning a distributed measurement, control and regulation system.
And: the I/O modules can cooperate effortlessly with the other intelligent network members thanks to SOA (Service Oriented Architecture) .



The housing of the Ethernet I/O modules is divided into two parts:
Left side: Connection part for Ethernet, Trigger/Synchro and voltage supply, which is the same on all modules
Righ side: Connection part for I/O signals (digital, counter, analog and length measurement)

Modular extendable system

Ethernet, synchronisation and supply signals can be carried from one module to the next one. In this way you can acquire and process distributed I/O signals directly from machines.
Because of these characteristics the I/O modules are suited to simple distributed applications and to complex applications, in which numerous devices must work together with signals that are a long way away.

Functionalities of the Ethernet I/O modules:

- MSX-E1701: 4 counters and 16 digital I/O, 24 V
- MSX-E3011: 16 differential analog inputs, 16-bit or 4 analog inputs for simultaneous acquisition
- MSX-E3511: 8 analog outputs, 16-bit
- MSX-E3701: Acquisition of 4/8/16 inductive displacement transducers (compatible with Tesa, Solartron,...)

More information on www.addi-data.com

Visit us on our website and get more information about the following topics:

- Protection for the use in rough environment
- Signal synchronisation outside the Ethernet network
- Intelligence by ARM®9 technology
- Implemented Internet technologies
- Connections
- Complete accessories
- Article about „Synchronous measurement with standard Ethernet"

Please click on our website on „Products" > „Ethernet I/O modules" to get the information.

Control and regulation

▷ Counter and digital I/O

preliminary

MSX-E1701

4 counter inputs, 16 digital I/O, 24 V

Degree of protection IP 65, – 40°C to + 85 °C

The Ethernet I/O module MSX-E1701 combines two functionalities: 16 digital inputs and outputs, 24 V as well as 4 counter inputs for the acquisition of encoders. All inputs and outputs, incl. counter inputs, are optically isolated up to 1000 V. LEDs show the status of the inputs and outputs.

Measurement data acquisition

▷ Analog input

preliminary

MSX-E3011

16 analog inputs, differential, 16-bit

Degree of protection IP 65, – 40°C to + 85 °C

The Ethernet I/O module MSX-E3011 has 16 differential analog inputs. Voltage inputs are available as standard and current inputs are available as option. A group of always 4 channels is acquired (multiplexed), and so up to 4 channels can be sampled simultaneously.

Data acquisition ▷ Analog output

preliminary

MSX-E3511

8 analog outputs, 16-bit

Degree of protection IP 65, – 40°C to + 85 °C

The MSX-E3511 is an Ethernet I/O module with 8 analog outputs and a resolution of 16-bit. Voltage (0-10 V, ± 10 V) and current outputs (0 - 20 mA, ± 20 mA) are available. The module is protected against overtemperature, overload and short-circuits. Additionally, you can realise exact error diagnostics with the module MSX-E3511.

Data acquisition ▷ Length measurement

MSX-E370x

Acquisition of 4, 8 or 16 inductive displacement transducers

For half-bridge or LVDT transducers

Degree of protection IP 65 or IP 40 / 0°C to 60°C

Up to 16 displacement transducers (half-bridge or LVDTs) can be connected directly via a 5-pin M18 connector and acquire data on site with a resolution of 24-bit.

FAX Answer

Please send me more information about the Ethernet I/O modules

- ☐ Digital I/O / Counter - MSX-E1701
- ☐ Analog input - MSX-E3011
- ☐ Analog output - MSX-E3511
- ☐ Length measurement - MSX-E370x

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Phone:

E-mail:

ADDI-DATA GmbH • Tel. +49(0)72 23 / 94 93-0 • Fax: +49(0)72 23 / 94 93-97 • info@addi-data.com • www.addi-data.com