Products and technology

Take it easy

Put your binary I/Os where you need them—with the new ISIO 200

One frequent requirement expressed by system integrators and panel builders is the need for a device that handles a small number of I/Os that cannot be wired to the existing substation automation devices (e.g. protection relays) because there are either no free terminals left or the connection is so remote that the wiring would be too complicated. With ISIO 200, our small and cost effective I/O terminal, we offer you an easy-to-use solution for such demands when IEC 61850 GOOSE messaging is used in a power utility automation system.

When flexibility meets simplicity

ISIO 200 is a versatile and compact binary I/O terminal. As a component of an automation system, the terminal interfaces with binary signals that are not handled by other devices of the system. It communicates via the fast and robust IEC 61850 GOOSE protocol, and therefore interoperates with a wide range of devices. In addition, you can also utilize ISIO 200 by combining with CMC test sets for testing complex protection schemes.

ISIO 200 does not require a dedicated power supply because it is supplied with Power over Ethernet (PoE). The PoE supply that ISIO 200 uses minimizes wiring efforts and simplifies handling. For applications with devices without PoE, either a PoE injector or an external DC supply can be used.
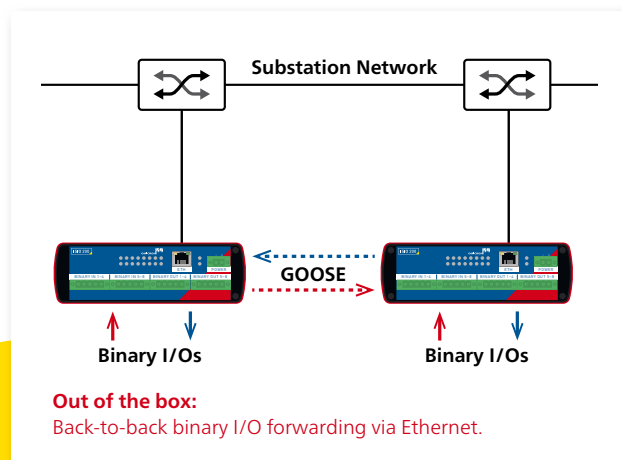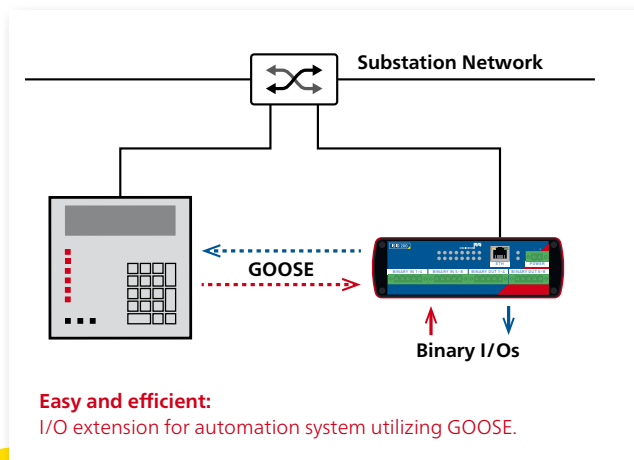
Easy configuration

You can configure ISIO 200 via a built-in web interface and download its configuration description in the standardized SCL format for further use in the IEC 61850 engineering process. Therefore, you do not need to install and use any special configuration software on a computer.

ISIO 200 in regular automation system operation

As an integrated part of an automation system, ISIO 200 provides the additional binary I/Os that are frequently required with ease and efficiency. Furthermore, with two devices positioned 'back-to-

Easy and efficient:
I/O extension for automation system utilizing GOOSE.

Out of the box:
Back-to-back binary I/O forwarding via Ethernet.

back', binary status information can be tunneled through the power utility communication network. If you order ISIO 200 devices in matched pairs, they are pre-configured to subscribe to each other. They work right out of the box without requiring any further setup.
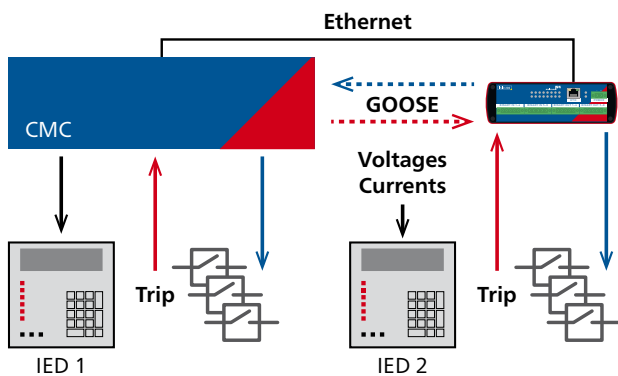
ISIO 200 for testing purposes

Testing in automation systems often requires long distances to be bridged or an extension of CMCs' binary I/O capabilities. When used for testing purposes, ISIO 200 serves as an accessory for CMC test sets and facilitates access to remote binary I/O terminals. It can be placed near remote

terminals to minimize conventional wiring. The longer distance to the test set is simply bridged with an Ethernet cable. In addition, it can be installed as a permanent test terminal with the binary I/Os of a protection relay wired to an ISIO 200 device. When testing sophisticated protection schemes, for example with main and backup protection and tele-communications, you can utilize ISIO 200 by adding binary I/Os to the CMC test sets. ⚡

⌦ **www.omicron.at/isio200**

Fred Steinhauser
Product Manager

ISIO 200

> Cost-effective way to add binary I/Os to a power utility automation system
> Interoperable with a wide range of devices communicating via IEC 61850 GOOSE messages
> Simple configuration, IEC 61850 engineering support via built-in web interface
> Convenient bridging of long distances between binary I/Os
> No dedicated power supply needed when used with devices with PoE ports
> Enables CMC test sets for testing complex systems with a large number of binary I/Os

The ideal extension of the CMC's binary I/O capabilities while testing sophisticated protection schemes.