



Applications

Multichannel control unit for as many as 8 detection points

- Connection of single sensors
- Control of multiple sampling systems
- Output of different measuring ranges from a single sensor
- Arithmetic processing of different signals from one or more sensors

Features

- Readings, status information and setting possibility at a central point
- Physical access to sensor required only for servicing
- Connection of SIGRIST sensors via a digital BUS
- Ability to connect sensors for other variables via analog inputs
- Modular design with plug-in card modules

MULTICHANNEL CONTROL UNIT SIBUS

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Multichannel measurement

Centralizing the measured data from up to 8 detection points is the basic idea of SIBUS. All SIGRIST photometers with RS485 communication can be connected via a digital BUS, which also permits the transmission of status information and configuration of the sensors right from the SIBUS. A further application is the control of multiple sampling systems, where a number of sample flows are fed cyclically to a photometer by a valve unit. The unit also permits calculation of the difference or ratio between two input signals and output of the result. This permits the use, for example, of differential turbidity measurement or turbidity-compensated color measurement.

Inputs

Besides the connection of SIGRIST photometers, it is also possible to connect any other desired sensors via analog inputs (4 ... 20 mA or 0 ... 10 V). And digital inputs can be used for accepting and displaying information from limit switches and fault relays or other types of digital status data.

Outputs

In addition to an analog output 0/4 ... 20 mA for each reading, digital interfaces RS232 or PROFIBUS DP are also available for transmitting measured data. Furthermore, relay modules are available that can be configured as limit or fault relays.

Construction

The SIBUS is conceived as a 19" unit. The two-line LC display and the plain-text-guided operating structure provide easy access for operation, configuration and servicing. The various input and output possibilities are designed as plug-in modules, thus permitting optimal configuration for specific applications. Besides the interface module for connection of the SIGRIST photometers, the basic version contains an analog output module and a relay module. Available options are:

- Analog output module with 4 electrically isolated 0/4 ... 20 mA outputs
- Relay module with 4 freely configurable relay contacts 250 V AC; 4 A
- PROFIBUS DP module for connection to digital interface
- Analog input module with 4 inputs 4 ... 20 mA / 0 ... 10 V for connecting sensors for other variables
- Digital input module with 4 electrically isolated digital inputs
- Multiple sampling module with 4 relay contacts for controlling a valve unit

Up to 8 plug-in slots are available, of which 3 are occupied in the basic version.

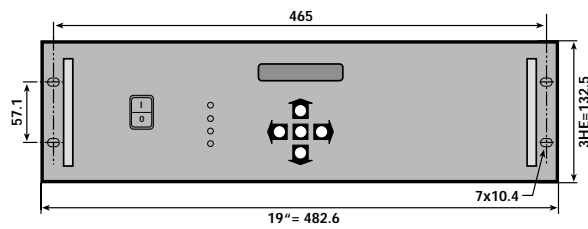
SITRA

The SIGRIST photometer is coupled to the bus by means of the SITRA transmitter, which is mounted right next to the photometer. The SITRA also takes care of supplying 24 V DC power to the photometer and conditioning the bus signal. For servicing work, a SIREL single-channel control unit can be connected to the SITRA for local operation.

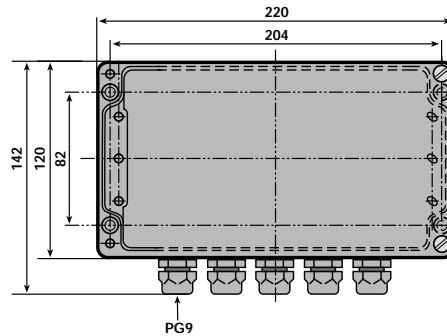
Installation/Mounting

Installation as 19" unit either right in a switchgear cabinet or field-mounted in a Rittal or stainless steel protective housing.

Dimensions

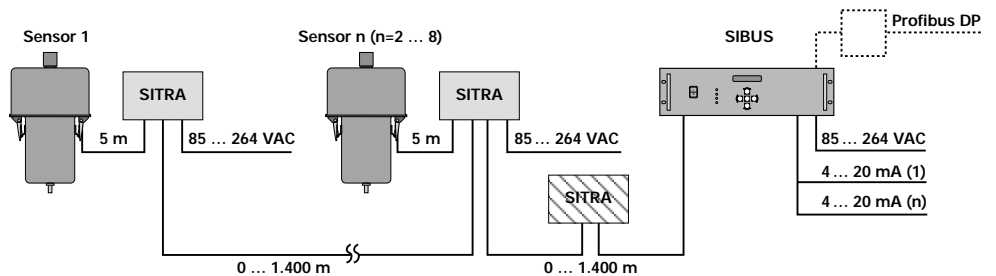


SIBUS



SITRA

Connection diagram
SIBUS



SPECIFICATIONS

SIBUS

Power supply:	85 ... 264 V / 47 ... 440 Hz
Power input:	8 W (not including photometer)
Display:	LC display with plain-text information
Dimensions:	480 x 290 x 135 mm
Ambient temperature:	0°C ... +50°C
Weight:	3.8 kg

Modules

Analog output module:	4 x 0/4 ... 20 mA; electrically isolated; burden max. 350 Ω
Relay module:	4 separately configurable relay contacts 250 V AC; 4 A
Analog input module:	4 x 4 ... 20 mA / 0 ... 10 V
Digital input module:	4 digital inputs; electrically isolated
Multiple sampling module:	4 relay contacts
PROFIBUS DP module	

SITRA

Power supply:	85 ... 264 V / 47 ... 440 Hz
Power input:	20 W (including photometer)
Dimensions:	220 x 120 x 90 mm
Ambient temperature:	-20°C ... +50°C
Protection type:	IP 65
Weight:	2.0 kg
Connection to photometer:	4-core cable, up to 20 m

www.nobbe.de

Subject to change without notice 10113 E/1 (08/01)

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