Sensor Unit I/O Unit

DK 7320.210

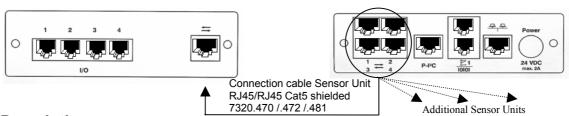
Note:

For reasons of clarity of the presentation, these operating instructions do not contain all information details and also cannot cover every possible case of installation, operation or repair. Technical specifications are subject to change without notice. In case of doubt, the German text prevails.

Processing Unit:

PU 7320.100

Sensor Unit: I/O Unit 7320.210



Description:

The sensor units can be connected to the Processing Unit 7320.100 (max. 4 units). One I/O sensor unit performs the function of 4 individually assignable inputs or outputs. The sensors and actors from the Rittal accessory products range can be connected. The sensors are assigned a code by which they are automatically identified and set by the CMC TC system. The sensors can be used if the following components are available:

- Processing Unit (7320.100) with mains adapter (e.g., 7320.425), national-standard connecting cable, programming cable. - Connecting cable (e.g., 7320.470, 7320.472 or 7320.481)

Conditions for use / safety instructions:

- The sensor unit must only be used together with the Rittal CMC-TC system.

- The operating instructions / safety instructions of the Processing Unit (7320.100) apply, where the sensor unit is described in detail. The conditions for use, safety instructions and warranty terms are also described there and must be observed.

- Connection cables 7320.470, 7320.472 or 7320.481 are required. Specified Cat5 cables can be used for special applications. These are described in detail in the operating instructions of the Processing Unit (7320.100). Please contact our central office.

- Use only the sensor connection cables delivered with the sensors / actors for connection to the Sensor Unit.

- It is absolutely necessary that these cables are installed separately from mains power cables. - The use of the sensor units is exclusively limited to the specified ambient conditions.

- It is forbidden to open the sensor enclosures. They do not contain parts requiring maintenance.
- Before making the connection, check to be sure that the sensor can be used with the PU, sensor or actor.
- It is forbidden to render safety equipment ineffective.
- Direct contact of the sensor unit with water (e.g., dew), oil sludge or any aggressive substances is forbidden.

- Use in locations with flammable gas or vapor is forbidden. Protection from water, dust, etc. must be ensured by installation in a cabinet or rack

- The CMC-TC system must not be live with voltage when the sensor unit is connected to the PU, sensor or actor.

- The sensor unit must be installed properly as described in the separate installation instructions.

- The accuracy of analog inputs can suffer in an environment with electromagnetic disturbance.

- The analog inputs (4-20mA) 7320.520 are electrically connected with the CMC-TC power source. When 4-20mA sensors are connected, please check whether these can render the isolation of the PE from the CMC voltage ineffective or cause earth loops. It may be necessary to use an external isolation amplifier. The GND terminals of the analog units are interconnected internally.

The EMC can be improved by additional measures. Please consult our central office.

- In environments with increased electromagnetic noise (e.g., industrial estates) the EMC can be improved by additional measures. Please consult our central office.

- The ambient conditions / safety instructions in the instruction manual must be observed.

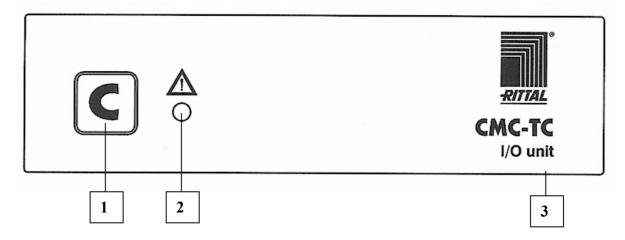
- Damage due to non-compliance with these instructions /ambient conditions and the instructions for the Processing Unit 7320.100 is not covered by our warranty. Rittal is not responsible for any consequential damage.

- Injury to persons or damage to property which is due to improper handling or non-compliance with safety instructions is outside Rittal's responsibility. Any such case is not covered by warranty.



Umschalten auf Perfektion

Description of the I/O Sensor Unit 7320.210 **Front**



The Input / Output Sensor Unit has two principal functions:

- Input: To transmit digital and / or analog input signals to the PU. There are several sensors available for this function

- Output:

To control a relay through the network management system in conjunction with the PU. The relay output module 7320.590 is available for this function.



Control key

The C key can be used to check and edit the configuration of the sensors and actors of this unit after setting up or changing the installation. The C key must be pressed at least for 3 seconds.



2

Red:

3

Alarm LED

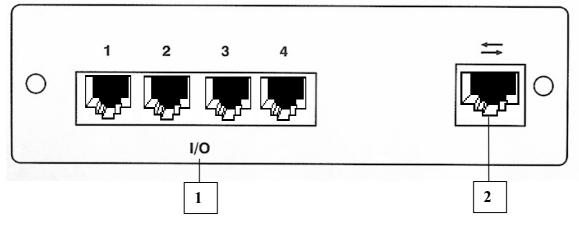
No fault detected Green: Orange: Warning Blinking red/yellow/green: 'Configuration change' of the sensor unit Alarm

Mounting bracket

The sensor unit can be integrated in the 1 HU erection unit 7320.440 using the bottom mount or it can be mounted to the system chassis in the rack. For the latter option, the single erection unit 7320.450 can be used.



Description of the I/O Sensor Unit 7320.210 Rear



I/O¹

Inputs/outputs I/O RJ12

4 universal ports are available in total. Each port can be used as

- analog input,
- digital input,
- relay output. -

The sensor unit is equipped with an automatic electronic ID circuit which the system uses to set up the exactly this sensor type.

Press the C key (at the front of the unit or at the PU) to start the initialisation procedure. The following sensors with ID are available:

| | Analog sensors: (input) | | |
|--------------------------|--------------------------|--|--|
| | 7320.500 | Temperature sensor | |
| | 7320.510 | Humidity sensor | |
| | 7320.520 | Connection of open analog 4-20mA input for customer-system sensors | |
| | Digital sensors: (input) | | |
| | 7320.530 | Access sensor | |
| | 7320.540 | Vandalism sensor | |
| | 7320.550 | Air flow sensor | |
| | 7320.560 | Smoke detector | |
| | 7320.570 | Motion detector | |
| | 7320.580 | Connection of open digital input for customer-system sensors | |
| | 7320.600 | 230V AC voltage monitor | |
| Digital actors: (output) | | | |
| | 7320.590 | Relay output with changeover contact | |
| | | | |

Input for Processing Unit RJ45 2

This input connects the sensor unit to the PU. The sensor units define the function of the PU. The sensor units are connected to the PU with cables (e.g., 7320.470, 7320.472 or 7320.481). The connecting cable transmits information and power to the sensor unit.



Technical data:

4 universal ports for digital inputs, analog inputs or relay outputs automatic identification of sensors and actors Supply voltage 24 V DC with supply connection from the Processing Unit Shock 1g Temperature range:: +5°C to +45°C Enclosure: IP 40

Address: Rittal GmbH & Co. KG / Auf dem Stützelberg / D-35745 Herborn / phone: (+49) (2772) 505 – 0 / Fax: (+49) (2772) 505 – 2319 / e-mail: Info@rittal.de / Internet: http://www.rittal.de

