

Networking, visualisation and operation of Aspirating Smoke Detectors.

FidesNet



FidesNet enables the interconnection of multiple SecuriSmoke aspirating smoke detectors for visualisation using one or more FidesControl RCU 700s*. The performance scope includes RS-485 networking as well as the visualisation and operation of all ASDs connected to the FidesControl RCUs connected in the network. The FidesNet networking solution makes it possible to connect SecuriSmoke aspirating smoke detectors to superordinate systems using the FidesPort NCU 900**.

Applications

The FidesNet network solution is typically used wherever remote visualisation and operation are required. Reasons for this may be hard-to-access areas such as security zones at airports, laboratories, or IT environments in which aspirating smoke detectors are used but where a technician does not always have access or can access only with difficulty. The networked SecuriSmoke aspirating smoke detectors can be configured via an RCU 700.

Another possible application is centralised display and operation in a safety management system in order to monitor the entire installation from a single location.

In addition to remote visualisation and operation, another important area of application is the ability to connect to other systems using standardised interfaces. For example, the transfer of relevant measurement data to the management system of a data centre is an important safeguard for an operator concerning the current state of the system.

Operation

Operation is via the 7-inch touch panel of the RCU 700 FidesControl unit. All data of the networked aspirating smoke detectors is available on the display. Each networked detector can be accessed via an RCU 700 to retrieve detailed information, for example for pending maintenance work. The detectors can be isolated by channel as well as reset in the event of errors or alarms. It is also possible to parameterise the networked ASDs via the display.

The display language is user configurable. Available languages: German, English, simplified Chinese.

Application examples: Remote operation of the aspirating smoke detector or connection to a management system



Networking

Up to 100 SecuriSmoke aspirating smoke detectors can be networked per FidesNet. The ASDs connect to the FidesPort NCU 900 via RS-485 or Ethernet. For hierarchically superordinate systems such as management systems, the data of the networked ASDs is available from the NCU 900 via Modbus and SNMP.

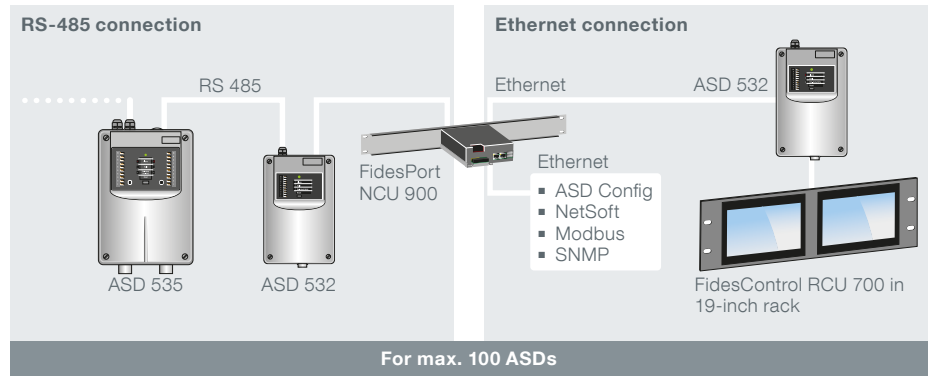
Adjust parameters

You can adjust the following parameters with the programming function:

- Alarm threshold, airflow tolerance window, dust/soiling thresholds, fan levels
- Perform initial reset
- Trigger test events
- Switch/trigger relay

Multichannel application with channel identification

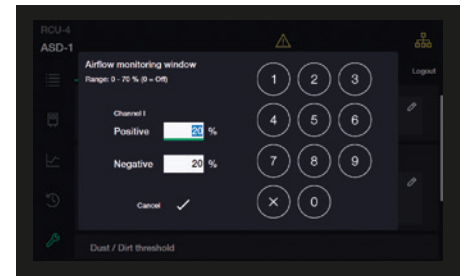
Precise identification of the smoke source is possible thanks to REK 511 (REK = channel identifier). The precise identification of the smoke source enables you to take appropriate measures quickly and effectively.



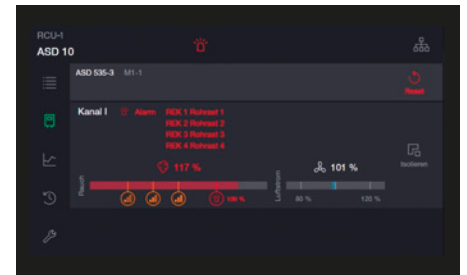
Up to four REKs can be connected directly to an ASD 535. Networking with FidesNet enables straightforward visualisation of the state of each individual REK.

As a practical addition to smoke detection with the standard ASD, a multi-channel ASD with REKs can also be used for control cabinet monitoring.

Adjust parameters via "Programmer" function



Visualisation of networked REKs



FidesControl RCU 700

FidesPort NCU 900

Technical data

Supply voltage	14-30 VDC	14-30 VDC
Interfaces	RJ45 (Ethernet) USB	2 × RJ45 (Ethernet) 2 × USB 1 × RS485
Number of ASDs	Max. 100 per RCU 700	Max. 100 per NCU 900
Housing	19-inch frame	19-inch frame
Colour	Anodised black	Painted black
Dimensions (W × H × D)	483 × 133 × 54 mm	483 × 44 × 169 mm
Operating temperature/humidity	0–50 °C; 95%	0–50 °C; 95%
Technical documentation	T 140 741	T 140 741

Order numbers

11-5000004-01-xx	RCU 700	*Remote Control Unit
11-5000003-01-xx	NCU 900	**Network Communication Unit
11-5000006-01-xx	RMF 19-1	RCU 700 mounting frame 19-1
11-5000006-02-xx	RMF 19-2	RCU 700 mounting frame 19-2

Supported devices

ASD 535	Aspirating smoke detector for 1 or 2 SSD 535 smoke sensors
ASD 532	Aspirating smoke detector for 1 SSD 532 smoke sensor
SIM 35	SIM 35 serial interface module

Subject technical changes and delivery possibilities.