



Total Building Solutions

VISONIK with all fire/intrusion/gas panels on CERLOOP

Interoperability solution

Building automation and control system with a network of fire/intrusion/gas panels

Highlights

- Modular, user-friendly building automation and control system (building automation and life-safety & security)
- Integrated monitoring of all building installations (building automation, HVAC, fire, security, safety etc.)
- Single-user PC operation
- Modular software to meet all customer needs
- Ease of operation in familiar Windows environment
- Standard network technology for secure and fast communication
- Full compatibility with Siemens products for fire, security, safety and automation.
- Assurance of total reliability
- Wide-ranging application competence
- Safe investment thanks to modular software and open architecture
- Flexibility in adapting to organizational changes and system expansion
- Modern information and reporting system
- Web-enabled
- Combined logging
- High quality graphics-based management station for handling fire & safety systems
- Solutions based on openness and standards (OPC)

- Facility to link intervention text messages, and place these in the graphics in areas where fire detection is installed (especially important in hazardous areas)
- Scope for alarm routing via fax, e-mail and SMS – important and often requested

System architecture

This configuration allows for the integration of all fire panels (CS11 AlgoRex and CZ10), intrusion panels (CS4, CS440, CZ12) and gas panels (CC60) in a CERLOOP¹⁾ configuration into the VISONIK DCS via the NISE-03 Interface and an SGU NISE driver (System Gate Unit). The SGU NISE Driver can be installed on the DCS server or on a dedicated SGU machine (running on WIN NT) connected directly to the Ethernet.

¹⁾ Proprietary Class A loop

Communication

Management level	<ul style="list-style-type: none"> • Monitoring of all major life safety information on DESIGO INSIGHT • Alarm handling of the whole system from DESIGO INSIGHT • Supported commands: acknowledgement, day/night organization, exclude/include group, control element on/off, test/include group. • Consistency of data assured between locally and centrally operated devices
Automation level	<ul style="list-style-type: none"> • Process interaction between life safety and HVAC subsystems
General	<ul style="list-style-type: none"> • Supervision of all physical communication connections • Supervision of database consistency

Communication / connection

- AlgoRex (CS11) C-Bus clusters via CK11, CERBAN protocol and NISE-03 to DCS via SGU driver.
- All other panels directly via CERBAN protocol and NISE-03 to DCS via SGU driver.

Combined system components

Level	System	Name	Software version
	Building automation & control system		
Management level	Management station	VISIONIK	V 20.xx
		DESIGO INSIGHT	V 1.1
Automation level	Server	DCS	V 20.xx.xx
	Safety & security system		
Automation level	Fire panel	AlgoRex CS11	V5.xx and earlier
		CZ10	V4.x and earlier
	Gas panel	CC60	V5.x and earlier
	Intrusion panel	CS440	V9.xx
		CS4	V6.x and earlier
		CZ12	V04 and earlier
	Connectivity components		
Automation level	SGU	SGU-NISE	V1.00.00 BL0002
			V 4.32
		NT OS-LAYER	V 4.4.18
		SGU – V4	
	NISE	NISE-03	V 6.0
	MK7022 gateway	MK7022	V 10.xx
	CK1142 (for CS11 only)	CK1142	V 5.xx

Recommendations

- Max. 2044 life safety data points per NISE
- Max. 250 commands from NISE to FSP controllers
- Max. 3 physically connected NISE per SGU
- Max. 1 CERLOOP connection per NISE + 2 CERBAN connections – max 18 subsystems, max. 16 subsystems per MK7022 (= per CERLOOP)
- Max. 4 AlgoRex per CK11
- Max. 6132 life safety data points per DCS

Engineering process / Tools

- | | |
|---------------------|---|
| Tools | <ul style="list-style-type: none">• NISE Configurator |
| Engineering process | <ul style="list-style-type: none">• Define life safety data points to be transferred to DCS:<ul style="list-style-type: none">– For AlgoRex by importing from AlgoRex engineering data file to NISE Configurator– For all other panels by a fast manual definition process within NISE Configurator• Data points are then treated as standard VISONIK data points• Graphic symbols library available, for representing life safety data points in DESIGO INSIGHT |

