Total Building Solutions

**DESGO INSIGHT and LMSmodular**

Interoperability solution

Combined danger management (life safety & security) and building automation and control system

**Highlights**

- Modular, user-friendly management system (for building automation & control and life-safety & security)
- Integrated monitoring of all building installations (building automation, HVAC, fire, security, safety etc.)
- Modular software to meet all customer needs
- 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
- Flexibility in adapting to organizational changes and system expansion
- A good solution for informing users promptly, fully and reliably about deviations from defined values
- 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 solution allows the integration of DESIGO INSIGHT as the building automation and control system and LMSmodular as the danger management (life safety and security) system. It provides a high-security unified alarm-handling interface for all emergency conditions arising from both disciplines, while ensuring functional integration at the automation level.

Communication

Management level
- Alarm handling, supervision and control via LMSmodular for danger management (life safety and security) and building automation and control functions
- Objects supported in NCRS: On/off for binary output modules.
  In LMSmodular, the NCRS objects are represented as a cluster of DF8000 units
- NCRS blocks supported:
  - Digital blocks: VDO, DIG, RSDI, RSDO, RSDZ, RSUDI, RSUDO, NIDA, RSDS, RSDP, NIS, LG2, LG1, VDI, LAN, NODE
  - Alarm blocks: ALA, COS, RSCOS, FBK
- Monitoring of all major life safety information with DESIGO INSIGHT
- Consistency of data assured between locally and centrally operated devices

Automation level
- Process interaction between life safety and HVAC subsystems and vice versa.

General
- Supervision of all physical communication connections
- Supervision of database consistency
- Synchronization of system clock

Communication / connection

- INTEGRAL via NCRS
- GW20 via NISE PAD
- NCRS host port protocol V2.0 features:
  - 8 data bits
  - No parity bits
  - 1 stop bit
  - Hardware configurable baud rate, in the range 300…9600 baud

Combined system components

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<td>Automation level</td>
<td>Please refer to LMSmodular documentation</td>
<td>INTEGRAL</td>
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DESIGO INSIGHT and LMSmodular

Siemens Building Technologies

CM120505en
30.07.2003
Connectivity components | Name | Software version
--- | --- | ---
GW-20 via NISE-PAD | NISE-PAD | V 5.27-00

Recommendations
- Max. 768 technological points
- Max. 4000 security points
- Max. 16 security (i.e. CZ12/CS4/CS4-40) and safety (i.e. CZ10/CC11/CC60) control units
- Max. 254 switching commands (ANA block)
- Max. 1 physically connected NCRS per NISE-PAD

Engineering process / Tools
Tools
- NISE Configurator

Engineering process
- Define life safety data points to be transferred to NCRS:
  - 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 NCRS data points
- Graphic symbols library available for representation of life safety data points in DESIGO INSIGHT