

VISONIK
SGU
System Gate Unit

PPQ0200.01F01E
PPS0200.01F01E



The System Gate Unit (SGU) allows any third party system to be linked to VISONIK. The SGU acts as a «black box» between the two systems and carries out all the conversion work.

The connection from the SGU to the VISONIK is done via a V.24 interface. The connection between the SGU and the third party system can be freely defined.

Application

Complex interlinking problems can be solved with the SGU. The connection to the third party system is freely programmable in «C».

Typical applications are for fire alarm or access control systems, PLCs or non-L&G controllers, etc., which need to be connected to the building automation system.

Functions

The SGU provides all links to third party systems with the VISONIK acting as master. Information about the third party system will be mapped to the VISONIK process image. In this way, all the functionality of «normal» VISONIK points is available.

The basic functions are as follows:

- Mapping of the third party system data to the VISONIK process image.
- Sending VISONIK messages via the SGU to the third party system.
- Sending messages from a third party system to the VISONIK.
- PRINT output from VISONIK COLBAS via the SGU to a third party system.

Summary of Types

The SGU is a software package which is available for the following operating systems:

System Gate Unit SW-Set QNX
System Gate Unit SW-Set OS/2

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Ordering

When placing an order, quote the part name, ASN reference number, project name and third party system, e.g.:

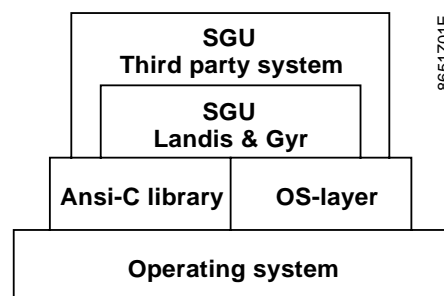
System Gate Unit SW-Set OS/2
Louvre Paris, link to Merlin Gerin PLC

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For every order, diskettes for the appropriate operating system will be delivered containing the SGU software together with the documents «OS-Layer Description» and «SGU Programming Manual».

Design Features

The SGU package is structured as follows:



Operating system

Version 2.00 of the SGU supports QNX version 2.15 and OS/2 version 1.2 /1.3 (not version 2.0).

Ansi- C library

This library contains the standard Ansi-C functions. The official C-compiler for QNX: C86 by Computer Innovation, and for OS/2: Microsoft C version 6.0.

OS- Layer

The OS-layer is a library of C-functions covering all tasks which cannot be solved with standard Ansi-C.
Applications which work only with Ansi-C and OS-layer functions are fully independent of the operating system. The OS-layer exists for QNX version 2.15 and for OS/2 version 1.2 / 1.3. To let the SGU run under a different operating system, the appropriate OS-layer for this operating system must first be implemented.

SGU Landis & Gyr

This part makes a software interface available which allows access to the SGU functionality. The interface is a specially programmed library of C-structures.

SGU third party system

This part needs to be newly implemented for each link to a third party system. Access to the VISONIK side is via the software interface from the «SGU Landis & Gyr» part. The third party system side is freely programmable with the only restriction being to use the OS-layer.

Technical Data

We reserve the right to make technical changes.

SGU connection One V.24 interface is occupied by each SGU connected to a VISONIK Communication Server .

Number of VISONIK points The VISONIK points used for the third party system are handled like normal VISONIK points. The number of points for all connected L&G substations and those used for the link must not exceed 10'000.

Recommended hardware	CPU	INTEL 386
	RAM for QNX	8 MB
	RAM for OS/2	16 MB
	Hard disk	40 MB
	Interface to VISONIK	RS232
	Interface to TPS	any

The SGU has been tested on a HP VECTRA 386/25 and will be supported on this platform by LGBC HQ.

Planning Guide

The following points which affect the main effort must be taken into consideration when using an SGU :

- The VISONIK points used for the third party system must be treated like «normal» VISONIK points in the project planning.
- The complexity of the protocols and the application of the third party system define the effort required to implement the software.
- When making such a link, it is essential to make all systems (VISONIK, SGU, third party systems) available to the programmer. A serious test of the application is otherwise impossible.

Installation Guide

For the installation of the SGU, it is assumed that the appropriate operating system has already been installed on the SGU hardware. For every supported operating system there is a «README.TXT» file on the delivered diskettes which explains how to install the SGU software.

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