



**DESCRIPTION**

**SYGMA II** is the acronym for 'SYstem for the General Management of Access': This software suite is intended for the centralisation of access control with retractable bollards.

**SYGMA** enables the general management of all remote access constituent parts: (bollards, automation, badges/cards, video, intercoms...) Networked operation using functionalities of today's communication media:

The **SYGMA** application can be installed on one or several networked workstations.

It is organised around several modules:

- The **NEXUS** communication kernel (core).
- The Centralised Technical Management (referred to as 'GTC') module based on a synoptic of controlled areas.
- The software for access control with contactless card, **CASCAM**
- Several management tools such as look-up of archives and statistics.
- And finally, basic administration and maintenance tools.

**'G.T.C.' Synoptic**

The Synoptic (GTC) gives access to management and operation functions such as:

- Remote control of access (simple opening or with a ticket, forcing the bollard down...)
- Visualisation of the access overall status (bollard retracted / upward, in motion, loops active or in default...)
- Details on the access site to do a check-up of all access slave components (bollards, PLCs, loops, compressors, lights, emergency button, timers, readers, connections...), list of events, alarms and defaults (Real time 3D visualisation).
- Setup of the various parameters and time relay on each access.
- Automatic openings, programming of opening time slots for market days or for deliveries.
- Management of Events and Alarms: real time display of all events happening on site.

The centralisation ('GTC') module may cover up several operation stations. The whole area controlled (or part of it only) may thus be supervised and checked upon from various services or premises, each running its own part of the site exploitation.

For instance, a **GTC** is installed for the roads department to follow up and maintain road system; another **GTC** is installed for the local police to run pinpoint openings with video and intercom, and another one for a third party who would take over from the local police for night time surveillance.

**CASCAM**

The **CASCAM** (secured access control with memory card) module software is designed to run data bases of users' cards.

**CASCAM** also offers management from several PCs, thus allowing users' cards to be entered and processed directly from the local municipal administration in charge.

In its standard version, **CASCAM** allows up to 6,000 cards (tags) per card reader, all sorted by access groups each defined by their own validity criteria.

Temporary access cards (read/write) are also possible with access rights specified; this facilitates control of occasional users such as contractors and craftspeople.

The transfer of passage rights to the various access points for each user is done through the "NEXUS" communication kernel, instantly with each new entry of modification. The user's card is therefore operational as soon as it is created.

**COMMUNICATION**

Communications between the "NEXUS" communication kernel and the various apparels is possible through whatever present data exchange medium is available on site:

- Serial communication
- TCP/IP Communication (Ethernet, ADSL, WIFI...)
- Copper link
- Fibre optic link
- Radio-relay link

**RECAPITULATIF**

With the **SYGMA II** software suite, you have:

- Complete control over onsite equipment
- Overall management through synoptic (on one or several stations)
- Remote access setup
- Detail of each access site for pre-diagnosis.
- Operation and management of the technical centralisation in a pedestrian area through one or several PCs via IP links.
- Management of users from several PCs without downloading action.

**FACTS & FIGURES**

- Number of access sites: **65,535**
- Number of cards per reader: **6,000** (exp. to **12,000**)
- Number of users (65535x6000): **393** million
- Number of events and alarms (expandable): **70** different ones
- Max. number of events in archives: **329** million billions
- Max. size of a file: **4** million tera-octets

**STANDARD FUNCTIONS**

- **Ergonomic** Human/Machine Interfaces.
- Operatable **locally**, in **network** (IP), or through the **Internet**.
- Easily upgradeable
- **Export** of data towards **Word**, **Excel** and **XML** as a standard.
- Automatic E-mail
- Automatic creation of **.PDF** files
- Management of access rights to software functions (via administrator's badge or log-in)
- In-course swapping from one language to another (22 languages possible)
- Real-time **3D** visualisation (OpenGL, DirectX) of charts and access sites.
- Convertible to **Access**, **dBase**, **Text**, **Oracle**, **XML**.
- Possible use of data bases with: **AS/400**, **Oracle**, **MySQL**, **SQL Server**, **Informix**, **DBase2**, **SyBase**, **Access**, **Progress**, **Xbase**, **OLE DB**, **ODBC**, **XML**.