Hotel room management software

The HSW3.1 software is the user interface for the hotel room management system in our Hotel Solution™ range. The hotel room management software runs on a PC loaded with the Microsoft® Windows® XP operating system, and provides the following functions:

- Indoor climate control and energy management
- Access management (access control and monitoring)
- Management of rooms and guests
- Monitoring of alarms and guest rooms
- Staff management
- System configuration, control and monitoring

Application

The HSW3.1 hotel room management software lets you manage guest rooms efficiently from a central location such as the reception desk. It keeps you connected "online" to the guest rooms and the booking system at all times.

The application window of the HSW3.1 hotel room management software gives you a continuous overview of the status of rooms, guests and hotel staff, from check-in to check-out. For safe and reliable operation, there is also an overview of all system alarms and messages.
You can also use the HSW3.1 hotel room management software for management of rooms and guests, access control and other operation, control and configuration functions of the Hotel Solution™ system.

**Functions**

### System topology

The HSW3.1 runs on a PC with the Windows® XP operating system. The PC is connected to the room controllers (e.g. HRC3.1 and HRC3.2) in the hotel rooms. The HSW3.1 hotel room management software retrieves and displays the status and alarm messages from the controllers cyclically.

An optional booking system (front office software, FOS, such as those supplied by Fidelio, Hogatex, Bosch and Protel, for example) can be integrated via the TCP/IP network or via a serial interface (RS232).

All the data from the room controllers and the front office system is stored in the Hotel Solution™ database for access by the HSW3.1 software.

### Overview of functions

The details of the various functions are as follows:

**Indoor climate control and energy management**
- Control of indoor conditions and energy consumption in the hotel room
- Management of energy groups and room groups
- Overview of room status and energy groups
- Control of the room status of complete room groups or energy groups

**Access management (access control and monitoring)**
- Programming of keys for guests and hotel service staff
- Monitoring of access and attempted access
- Facility to enable and disable guest and hotel service staff access to common areas

**Management of rooms and guests**
- Suite management
- Guest check-in and check-out
- Facility to integrate front office software (FOS)

**Monitoring of alarms and guest rooms**
- Display of room controller and software alarms, and room status
- Acknowledgement of alarms
- Functions to sort, filter and print alarm lists
Staff management
- Management of hotel service staff
- Management and configuration of service groups

System configuration, control and monitoring
- Monitoring of system information
- Monitoring and control of room temperatures
- Administration and control of the room controller data
- Monitoring of all hotel room states and alarms, with the facility to sort the information based on various criteria
- Alarm window for quick overview of new alarms
- User administration: management of system users and user profiles

Structure of the application
The application window is divided into the menu area, with a menu bar, buttons for the basic functions and a filter bar (A – C), the room list (D) and the alarm list (E).

Menu area (A – C)
The menu bar (A) provides access to all the functions of the program. There are also buttons (B) for access to the main functions needed for day-to-day work at Reception. The "Filter" area (C) allows you to filter out specific information.

Room list (D)
The room list (D) provides an overall view of all the hotel rooms and shows the main properties, parameters and room states in table form.

Alarm list (E)
The alarm list (E) is displayed in the lower part of the application window and presents alarms, messages and room states in table form. This makes it possible to identify current alarms in good time. As well as being displayed, alarms and messages can also be acknowledged and reset here.

Details in the room overview
The room overview provides detailed information about each room, e.g. room occupancy, a room temperature graph, and alarms and messages.
The hotel room management software prepares the data from the database or other subsystems suitable for display and presents it to the user in the room and alarm lists.

The alarm list shows all the current alarm and status messages from the hotel as a whole. The Hotel Solution™ system supports a variety of alarms. These alarms originate either from the room controllers or from the alarm-handling software.

- Guest in room
- Guest has pressed a button on the operator unit (e.g. SOS alarm/Call for assistance)
- Activation of the window contact
- The DGU (Data Gathering Unit) driver has set a room controller offline because it is not responding
- Check-in of a guest.

All active alarms are displayed and remain in list until they are no longer active. Specific alarms can be selected easily by use of the filter.

Alarms can be acknowledged by service staff. The user identification of the person acknowledging the alarm is stored in the system.

User profiles can be set up to define which alarms and messages can or cannot be displayed and acknowledged by a given user group.

A key task performed by the reception staff is the checking in and out of guests. For the purposes of guest check-in and check-out, the HSW3.1 hotel room management software is connected to the front office system. This is where the guest and room occupancy data is managed.

If there is a problem with the connection to the front office system, or if there is no such system, the hotel room management software can also be used to check guests in and out.

After check-in, an individual guest key can be encoded for the guest, e.g. in the form of a magnetic card. The guest code is assigned to the guest's key, thereby providing access for that guest. The key coding with a card encoder and the associated access management and monitoring are handled by the HSW3.1 hotel room management software.

The following types of cards can be used as guest keys:
- Magnetic cards
- Transponder cards
- Chip cards

Once the guest key has been encoded, it is recognized by the system and the relevant data is transmitted to the room controller. The key is then enabled for access to public areas and the guest's room.

At check-out, the guest key that was encoded in the check-in process is invalidated.

The hotel service staff can be assigned to service groups. Different properties and, in particular, access rights, can be assigned to the various service groups. The hotel room...
management software is used to program various service keys to provide hotel service staff with access to the rooms.

**Room configuration**

The rooms are setup and configured using the HSC tool and transferred to the Hotel Solution database. The rooms are then available in the hotel room management software.

**Room functions**

The room functions in the Hotel Solution™ system are controlled by room controllers. The room functions comprise:
- Control of the indoor room conditions,
- Lighting control,
- On/off signals from third-party systems,
- Various buttons on the operator unit,
- Various electrical contacts, such as the door contact and the window contact, and
- Internal status signals from the room controller.

**Status information**

Additional information about the status of the room is also generated. This includes, for example:
- Whether the room is occupied or free,
- Room renovation in progress, and
- Whether or not the guest is in the room

**Data sources**

All the data is stored in the Hotel Solution™ database. The sources of data are:
- The room controllers in conjunction with the DGU driver, and
- The interface to the front office system

**Configuring the system**

In addition to the configuration options already referred to, such as access control and room configuration, the Hotel Solution™ system can be configured in other ways with the hotel room management software:
- Access rights for guests and hotel service staff
- Encoder
- Room control via predefined scenarios (lighting scenarios)
- Direct control of room controllers
- System configuration
- Temperature profiles

**User management and security**

The HSW3.1 hotel room management software includes a user management feature, with which user profiles can be assigned to users. This provides the individual user groups with access to the specific functions and displays actually needed for their work.

**User profiles**

There are four different user profiles available which can be adapted to requirements as necessary:
- Read only – Display of alarms and room states.
- Check-in/check-out – Access to the display of alarms and room states, and to the functions required for checking hotel guests in and out (e.g. for the reception staff).
- All privileges but user administration – Access to all display and operator functions except user administration (for staff with specific training).
- All privileges – Access to all display and operator functions including user administration (for administrators).

**Login**

When the hotel room management software is started, the user is required to log in (with a user name and password), so that the program opens with the allocated user profile.

**Plausibility check**

As an additional precaution to prevent input errors, the entry of system-critical configuration data is accompanied by plausibility checks and security warnings before the current data is modified or deleted.
The HSW3.1 hotel room management software is ordered via a Hotel Solution™ project license.

**Example:**
XX Hotel Solution™ project license HSW3.1

**Project license**
The value XX for the project license is based on:
- The number of rooms
- The number of servers with hotel room management software
- The number of additional hotel room management software installations

**Note:**
For licensing, a dongle is required, together with a license file containing the project-specific license parameters.

**Language versions**
The HSW3.1 hotel room management software is available in the following languages (other languages on request):
- German
- English

**Compatibility**
The following hardware and software components are required for use of the HSW3.1 software:

**Note**
These components are not included in the delivery.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard PC with Windows® XP</td>
<td>For operation of the software (see &quot;Technical data&quot; section)</td>
</tr>
<tr>
<td>IP/KNX coupler</td>
<td>For connection to the room controllers</td>
</tr>
<tr>
<td>Hotel Solution™ database (Sybase / SQL Anywhere)</td>
<td>For storage of the data (room data, system data, etc.)¹</td>
</tr>
<tr>
<td>Front office system (e.g. Fidelio/Hogatex)</td>
<td>System for management of guest and room occupancy data</td>
</tr>
<tr>
<td>Card encoder (HBC1.M, HTW3.1/B or HCW3.2)</td>
<td>For encoding magnetic cards, transponder cards or chip cards</td>
</tr>
</tbody>
</table>

¹ Can optionally be installed on a separate PC or on the PC running the Hotel Solution™ system

**Note**
For an overview of the complete Hotel Solution™ system range, refer to document CM2S6301 and data sheet CM2N6301.

**Engineeing notes**

**Appropriate use**
The software must be used only for the application described in this data sheet. In this context, the project-specific properties and conditions are applicable, as detailed in the "Application", "Functions" and "Technical data" sections.
### Technical data

#### System requirements

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Standard PC with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>Min. 512 MB RAM</td>
</tr>
<tr>
<td>Hard disk</td>
<td>100 MB for installation of the application</td>
</tr>
<tr>
<td></td>
<td>(additional hard disk capacity for the database and</td>
</tr>
<tr>
<td></td>
<td>backup must be determined on a project-specific basis)</td>
</tr>
<tr>
<td>CD ROM drive</td>
<td>16X</td>
</tr>
<tr>
<td>Network card</td>
<td>For communication with the room controllers and for</td>
</tr>
<tr>
<td></td>
<td>optional integration into the Ethernet TCP/IP network</td>
</tr>
<tr>
<td>Serial port</td>
<td>RS232, for optional connection to FOS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system</td>
<td>Microsoft® Windows® XP</td>
</tr>
<tr>
<td></td>
<td>with Service Pack1 or later*</td>
</tr>
<tr>
<td>Hotel Solution™ database</td>
<td>Database, installed locally or on separate</td>
</tr>
<tr>
<td></td>
<td>PC: Sybase SQL Anywhere 8 database client with ODBC driver</td>
</tr>
</tbody>
</table>

**Note**

* Software HSW3.1 is not compatible with other operating systems or Windows versions other than Windows XP*