

YCS 200...210: Mobile Building Services (MBS)

Mobile Building Services (MBS): Room control and information portal via app

SAUTER Mobile Building Services (MBS) is a SAUTER cloud solution that is offered for various applications for buildings and premises. In combination with the Mobile Room Control (MRC) app available for smartphones and tablets, it can control room conditions in apartment, hotel and office buildings. The easy-to-use app – even from outside the room or building – and the related user comfort help fulfil the requirements of planners and builders for a state-of-the-art building.



Features

- Connects the local building management, including the integral room automation, with the room operation via smartphone or tablet
- Control of lighting, temperature, window blinds and ventilation (depending on the building equipment)
- Direct access to information such as caretaker services, cafeteria schedule and other information
- Direct information from the MRC app to caretaker services regarding comfort information and repair requirements or catering services for meeting rooms
- Access can be configured with different rights and validity periods
- Room identification and end user access via iBeacon® badges for smartphones and tablets (iOS and Android)
- Through the integration of “Indoor Localisation” or “Geofencing”, automatic allocation to the respective available options
- The perfect solution for apartment buildings, boarding houses, luxury apartments, hotels and office buildings
- High level of security and up-to-date functionality thanks to Microsoft Azure technology
- MRC app available free of charge in the Google Play Store and the Apple App Store

Overview of types

Type	Description
YCS200F300	MRC app subscription per apartment based on the total number of apartments (1-5 apps per apartment) – price per apartment per year / invoice of apartments with at least one badge created; invoice based on report with number of used apartments; issue date after one year of the first basic subscription
YCS200F310	MRC app subscription for hotel rooms, price per room per year / invoice of rooms defined in the MBS cloud; invoice based on report with number of rooms; issue date after one year of the first basic subscription
YCS200F320	MRC app subscription (w/o indoor localisation), price per subscription (device) / invoice of used badges defined in the MBS cloud; invoice based on report with number of badges per month; issue date after one year (first basic subscription)
YCS210F300	MRC app subscription (with indoor localisation), price per subscription (device) / invoice of used badges defined in the MBS cloud; invoice based on report with number of badges per month; issue date after one year (first basic subscription)
YCS200F200	MBS Cloud Basic subscription < 50 app subscriptions, first & following year (investor / operator) – automatically renewed every year
YCS200F210	MBS Cloud Basic subscription < 150 app subscriptions, first & following year (investor / operator) – automatically renewed every year
YCS200F220	MBS Cloud Basic subscription < 300 app subscriptions, first & following year (investor / operator) – automatically renewed every year
YCS200F230	MBS Cloud Basic subscription > 300 app subscriptions, first & following year (investor / operator) – automatically renewed every year
YCS210F200	MBS Cloud Basic subscription Office with indoor localisation < 50 app subscriptions / first & following year (investor / operator) including iBeacon® / indoor localisation option – automatically renewed every year
YCS210F210	MBS Cloud Basic subscription Office with indoor localisation < 150 app subscriptions / first & following year (investor / operator) including iBeacon® / indoor localisation option – automatically renewed every year
YCS210F220	MBS Cloud Basic subscription Office with indoor localisation < 300 app subscriptions / first & following year (investor / operator) including iBeacon® / indoor localisation option – automatically renewed every year
YCS210F230	MBS Cloud Basic subscription Office with indoor localisation > 300 app subscriptions / first & following year (investor / operator) including iBeacon® / indoor localisation option – automatically renewed every year

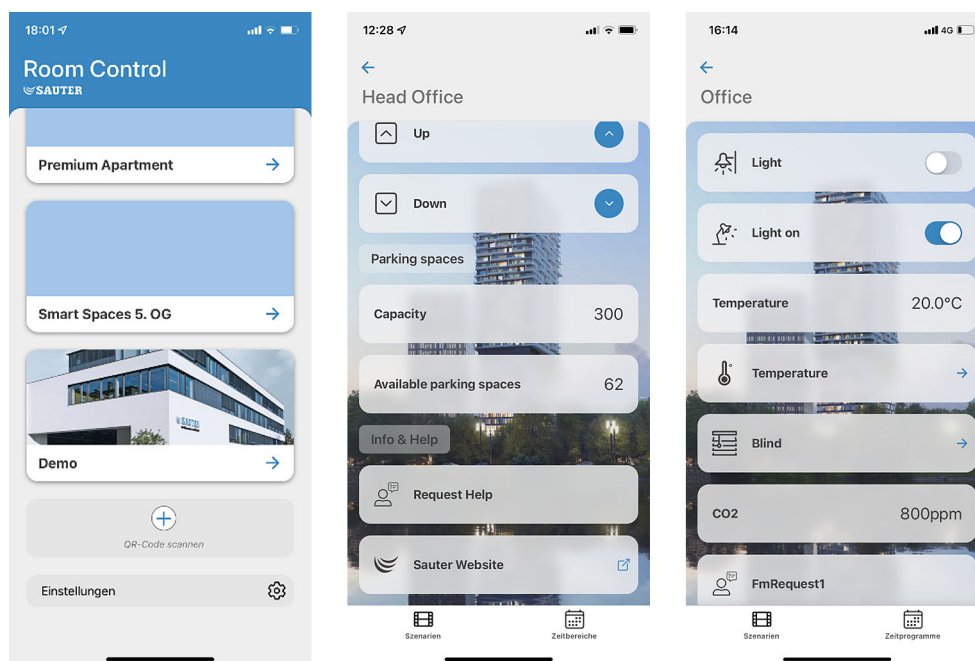


Area of application

End user:

The end user uses the MRC app to display and control room functions such as lighting, window blinds, temperature etc., depending on the apartment and room equipment. The app is available for iOS and Android.

- Secure authentication is provided by an access code that is made available via the MBS management console for each device. Only this key enables operation via the MRC app
- The end user in their capacity as main tenant, owner or employee can, in turn, assign access rights to family members, friends or subtenants via the MRC app
- Other functions include the quick activation of specific programmes via icons, such as access to canteen information and websites, and the direct reporting of faults to the facility management
- With iBeacon® badges, individual rooms can be automatically identified with the smartphone and the linked MRC view displayed with the available operating options
- End users can override the defaults from the building management system with their own time programmes and scenes



Facility manager:

The facility manager (operator) uses the MBS management console located in the SAUTER cloud to administer the access rights of end users. Here they maintain additional information on the individual users and grant the access rights via a QR code. The QR code is automatically generated in the system and can be sent to the end user either by e-mail or SMS according to the stored contact data.

- In the event of a change of tenant, the facility manager has the option of deleting the user access and all accesses associated with it. In the office area, for example, the user management is carried out by an authorised employee. This ensures that predecessors no longer have access after a change of tenant or owner
- The validity of the QR code can be timed in accordance with rental agreements and notice data as required



Invoicing model

The invoicing is via a subscription that is invoiced annually by SAUTER with the facility management.

The subscription consists of two components:

- A basic fee for the operation of the MBS management services
- A variable portion based on the number of apartments or rooms used, or the number of users in the office building

The facility manager can pass on the fees for using the MBS management services and the app to the end user, for example via service charge billing per tenant, company or apartment. The fees are based on user reports that can be individually adapted to the use or rental period.

Requirements

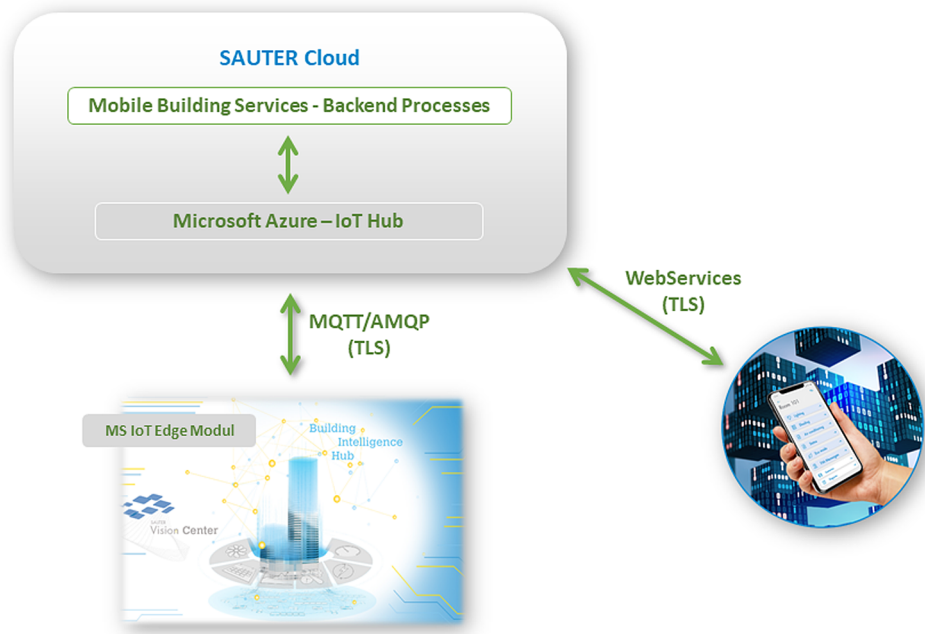
- SAUTER Vision Center (SVC) as a local building management system (BMS)
- SVC OPC UA server licence
- Connection of the local BMS to the Internet via router with appropriate security measures
- Smartphone or tablet with access to the SAUTER cloud
- Engineering of the MBS solution via CASE Vision

Schematic layout

The access to the individual applications is via a browser and is thus independent of the operating system, the hardware or the location.

The SAUTER cloud is based on the Microsoft Azure IoT Technology Suite (Platform as a Service) and is protected against data manipulation and read access via TLS. Certificates and current encryption technologies from Microsoft are used.

The interface to the MBS solution is SAUTER Vision Center; it ensures secure bidirectional communication for selected information via MQTT or AMQP.



Communication within the building

Communication within the building is via the BACnet, SAUTER novaNet, OPC UA, Modbus/RTU, M-Bus, KNX, Dali and SMI protocols.