

YCS 451...453: Digital Services – Remote Management



Comprehensive service options – fast and efficient

Remote Management is the ideal solution for active and immediate provision of services related to building automation, energy management, associated IT infrastructure and software applications. Service staff from external service providers as well as building operators and facility management benefit from the comprehensive and efficient service options through direct access to decentralised systems and applications. This means that faults can be rectified more quickly, maintenance and services can be carried out more efficiently and extensions and adjustments to applications can also be made remotely.

Remote Management is a service of the SAUTER Cloud. It not only enables users to authenticate themselves via a browser and Windows client, but also establishes access to the local systems with secure connections via various protocols.

Features

- Secure access to decentralised systems and applications
- Two-factor authentication via e-mail or SMS
- Fully transparent and secure network connection via browser and Windows client
- Remote access:
 - To applications such as SAUTER Vision Center or moduWeb Unity (via http/https)
 - To PCs and servers and their applications (via RDP/VNC)
 - Via VPN tunnel (Layer 2):
 - The local PC appears in the remote network structure (use of all engineering and network tools from the local PC in the remote system)
- Rights administration with user and group management for the assignment of rights for individual systems and buildings, right up to distributed properties
- Can also be used as an IoT gateway with a selection of protocols (YCS455F3**)

Overview of types

Type	Description
YCS451F010	G100 remote management connector with 2 Ethernet ports, incl. pre-installed OS and VPN licence
YCS451F002	3G/4G option for YCS451F001 (Huawei e3372 modem)
YCS452F200	Remote Management basic connector subscription with 5 secured connections
YCS452F210	Remote Management connector subscription, additional 5-pack of secured connections
YCS452F220	Remote Management connector subscription, 5-pack of time-limited, non-authenticated links
YCS453F200	End user subscription, access to all predefined connections via dashboard and Windows client
YCS453F203	End user + 1 VPN channel subscription, access to all pre-defined connections via dashboard and Windows client, incl. VPN tunnel (Layer 2 and 3)
YCS453F210	Engineering user subscription with full access to all protocols incl. VPN tunnel connection (layer 2) and Windows client
YCS453F220	Admin user subscription, full access to all protocols incl. VPN tunnel connection (layer 2) and Windows client, incl. user & group management
YCS455F300	KNX protocol
YCS455F301	Modbus protocol (TCP, RTU), master/slave
YCS455F302	BACnet protocol (IP, MSTP), server/client
YCS455F303	SAUTER Vision Center (SVC) API
YCS455F306	Mbus protocol (external level converter required)
YCS455F307	MQTT protocol (TCP, WS), broker/client
YCS455F308	OPC-UA protocol, server/client
YCS455F344	SNMP protocol

💡 The term of the connector subscription (YCS452F2**) is 12 months with automatic renewal. YCS452F200 must be ordered together with the universal gateway

💡 The user subscriptions (YCS453F2**) of the SAUTER Cloud for Remote Management are monthly subscriptions with automatic monthly renewal

💡 YCS455F3**: For further protocols, contact the product management.



Operator

- SAUTER service personnel for building automation, IT infrastructure and software services.
- SAUTER sales and service partners for providing efficient services.
- Building operators / facility managers for the central operation and control of local building automation and its systems.

Applications

Applications can be accessed using a standard internet browser or the SAUTER Connect Windows client.

Authentication takes place via SAUTER Cloud user management for the respective connection options. The use of two-factor authentication further increases security.

Applications with access via http/https:

- SAUTER Vision Center / Vision Center Manager
- moduWeb Unity, moduWeb Vision
- ecos MQTT client
- Web applications in general

Remote applications with computer access via RDP/VNC ¹⁾:

- SAUTER Vision Center server
- novaPro Open, novaPro Web
- CASE Suite and SAUTER configuration programs
- Programs in general which are installed on the local computer

Use of local service tools with remote access via VPN tunnel

The VPN tunnel configuration requires the RM Windows client (SAUTER Connect) to be installed.

Via VPN, users can integrate their computer directly into the local network. The computer appears on the network with a local network configuration (DHCP or static IP address) and can thus perform all functions as if the user were on site.

- CASE Suite, including with CASE Sun, CASE Engine, CASE Vision and CASE Export novaNet
- BACnet browser
- Wireshark
- NSO-specific engineering and migration tools

Use as a gateway/router

By licensing and enabling individual protocols or drivers, the device can be used as a gateway between different protocols such as Modbus and BACnet. It can also be used as a router between variants of the same standards, such as BACnet/IP and BACnet/MSTP.

Preconditions

- Ethernet connection (10/100 Mbit) and local internet connection or 4G mobile network for the Remote Management connector.
- Installation of the Remote Management connector (YCS451F010).
The G100 Remote Management connector has two separate Ethernet connections to ensure physical separation from the building automation network and the internet to the outside.
- VPN connection to the SAUTER Cloud via connector subscription.

The prerequisite for connection via GPRS/LTE is the SIM card of a telephone provider for data services and the YCS451F002 option (USB modem stick).

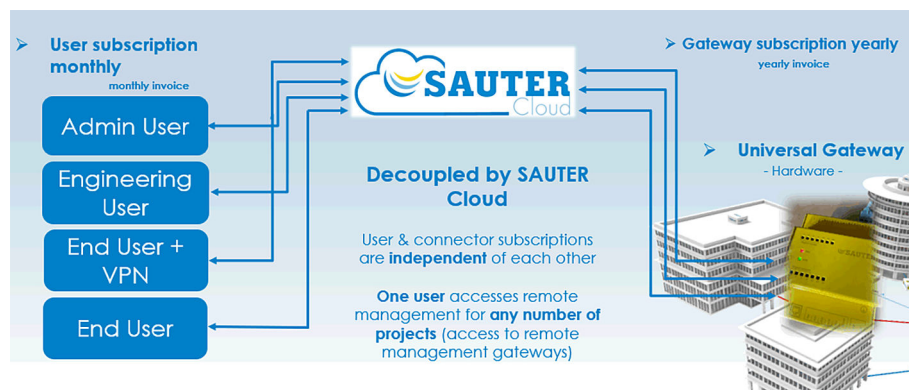
To connect meters with the MBus protocol (YCS455F306), a level converter must also be used.

Subscriptions

The Remote Management Digital Service structure consists of a selection of different user subscriptions and the connection subscription plus the Remote Management connector (hardware). The users and the individual remote projects (devices) are brought together in the SAUTER Cloud. This centre provides the secure connections to the individual projects in the field, as well as the secure and recommended 2-factor authentication of the users.

¹⁾ Applications that do not require administrator rights on the remote computer

In addition to the one-off hardware purchase costs for the RM connector, SAUTER offers subscriptions for the use of the digital services (cloud subscriptions). A distinction is made between connection subscriptions with terms of at least 12 months and monthly subscriptions for users.



User subscriptions

Administrator (Admin User subscription - YCS453F220):

- Has full user functionality for technicians
- Has full access to all connection protocols, including VPN connection (layer 2) and Windows client
- Manages user and group accounts, defines and administers organisational and project structures, and grants access rights to technicians and end users

Maintenance and service technicians (Engineering User subscription - YCS453F210):

- Can create, edit, and delete connections to the building technology
- Can define their own or customer dashboards
- Dashboards are available depending on the user and gateway

End users including VPN access (YCS453F203):

- Have access to all predefined connections via dashboard and Windows client, including the use of a defined VPN tunnel connection via SAUTER Connect client

End users, such as property managers or caretakers (End User subscription - YCS453F200):

- Have access to defined connections via dashboard and Windows client (http/https, RDP/VNC)

Connection subscriptions

Products: YCS452F200, YCS452F210 and YCS452F220.

- Defined and secured connections via http/https and RDP/VNC.
- Five predefined connections, directly selectable via the user or RMC dashboard.
- The secured remote connection is automatically established between the RMC and SAUTER Cloud.

The VPN tunnel is initiated via SAUTER Cloud and establishes a secure connection between the SAUTER Connect client / computer and RMC.

Example configurations

In the order examples listed, it should be noted that the project connection page to the SAUTER Cloud is separate and independent from the user area of the SAUTER Cloud. This means that the service employees are provided with user accounts in the branches and head offices of the countries. As a result, the users can access all projects or further projects added in the future, depending on the organisational and rights structures used and the rights assignments.

Organisations and branches for technician access

YCS452F200	RM basic connector subscription	Includes five secured connections
YCS453F210	Engineering User subscription	Access to all connection protocols, including VPN connection (layer 2) and Windows client
YCS451F010	G100 Remote Management connector with two Ethernet ports	Includes pre-installed operating system and VPN licence
YCS451F002	3G/4G wireless standard for YCS451F010	Huawei e3372 modem

Organisations and branches for technician access with additional customer access

YCS452F200	RM basic connector subscription	Includes five secured connections
YCS453F210	Engineering User subscription	Access to all connection protocols, including VPN connection (layer 2) and Windows client
YCS453F200	End user subscription	Access to all predefined connections via dashboard and Windows client
YCS451F010	G100 Remote Management connector with two Ethernet ports	Includes pre-installed operating system and VPN licence
YCS451F002	3G/4G wireless standard for YCS451F010	Huawei e3372 modem

Head office / central office for central services

YCS453F220	Admin user subscription	Full access to all connection protocols, including VPN connection (layer 2) and Windows client, including user and group administration
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