



EASY – SECURE – CONNECTED



CONTENTS

4 HOOC

6 THE HOOC SOLUTION

8 THE HOOC GATEWAYS

10 THE HOOC CLOUD

10 THE HOOC APP

12 APPLICATIONS

12 REMOTE ACCESS

14 REMOTE CONTROL

16 VIRTUAL NETWORK

18 ALARM NOTIFICATION

19 MONITORING

20 INDIVIDUAL SOLUTIONS

23 PRODUCTS

28 CONTACT

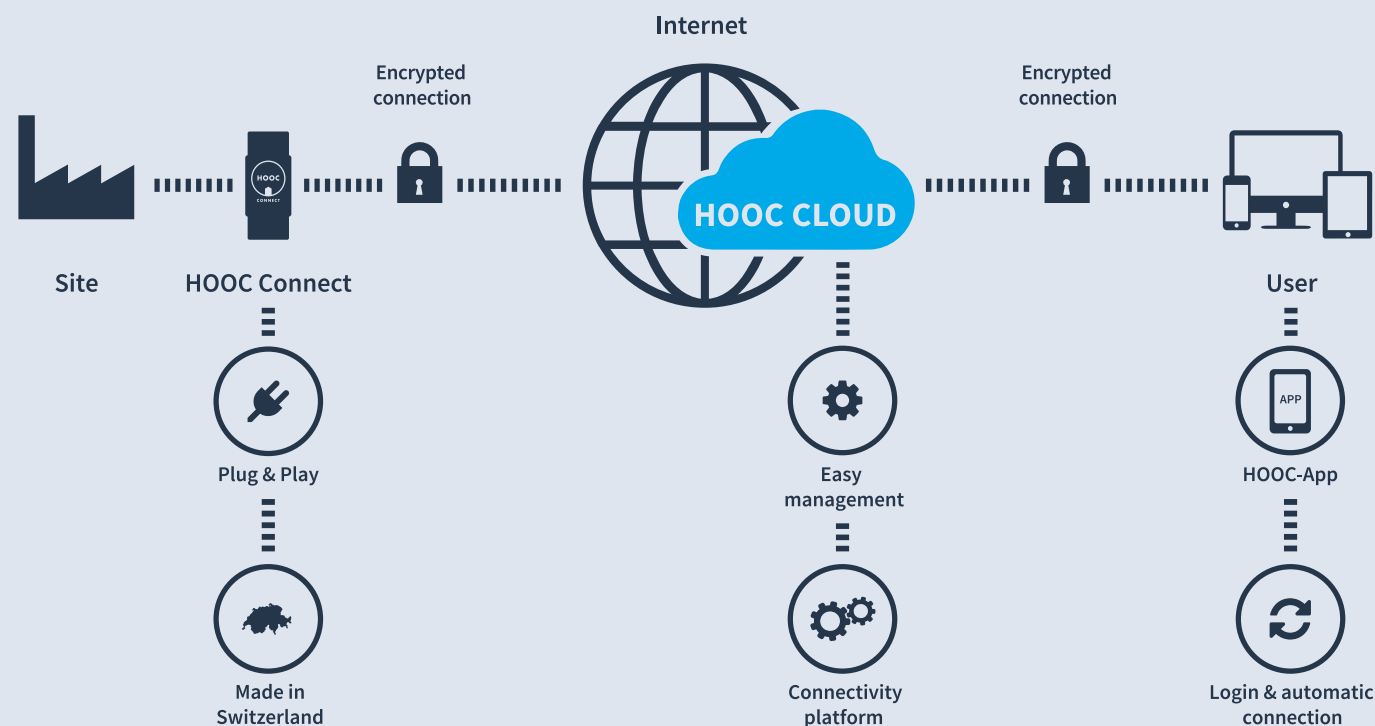


HOOC AG, Torweg 8, 3930 Visp, Switzerland
Phone +41 (0)27 948 46 00
www.hooc.ch, info@hooc.ch

THE INTERNET CONNECTS THE WORLD

HOOC MAKES THE BEST OUT OF IT

HOOC is the highly secure, scalable and easy to use Swiss IoT platform for remote access in the building automation and industrial automation industries. Plug & Play VPN Made in Switzerland



THE HOOC APPLICATIONS

Remote access

Plug & Play VPN: No public IP, no changes to firewalls and no port-forwarding needed.



Monitoring and data collection

Every system has its own history. Thanks to HOOC Monitoring, it is preserved.



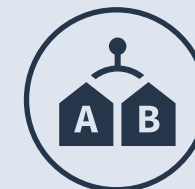
Remote control

The HOOC App offers remote control of field data at the click of a button.



Virtual Network

Your own secure and private network distributed across several locations.



Alerts

Stay informed about errors and changes thanks to push and mail notifications.



Individual

You have the idea, we have the solutions.



The digital transformation in building technology and Industry 4.0 leads to ever increasing requirements for the development and the availability of easy to use and integrated solutions. For this reason, HOOC has been totally committed to the digitalization of the building and industrial automation industries. Therefore the HOOC Cloud offers an easy and highly secure

remote access solution and centralized services such as, remote control, real-time data acquisition, data exchange, supervision and monitoring. With an amazingly simple approach, the HOOC Solution simplifies the control of building technology via IT applications using the security standards of a Swiss bank.



THE HOOC SOLUTION

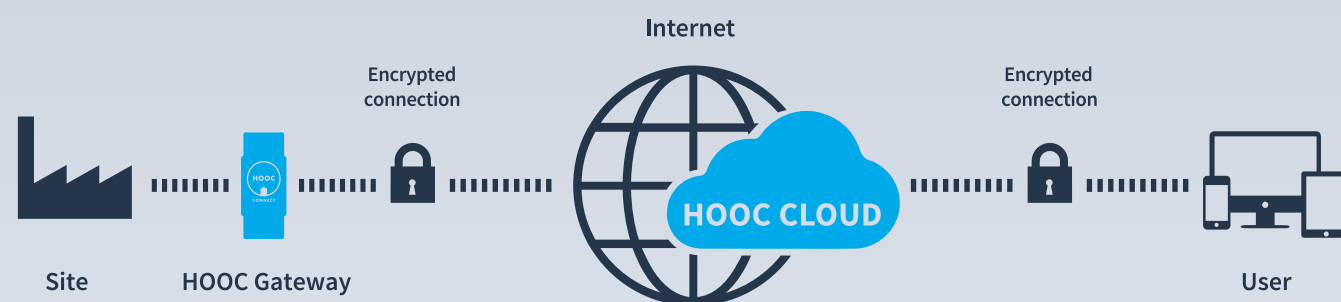
Efficient remote access simplifies the integration of complex systems. For this reason, VPN connections to remote networks and control systems (PLC, HMI, KNX, etc) are today a standard in the fields of industrial and building technology.

The HOOC technology offers a transparent transport layer and establishes a VPN connection to remote systems for users and applications.

System integrators and manufacturers currently face the following challenges:

- ✓ Ensuring secure access methods and their supervision
- ✓ Granting dedicated and temporary access rights
- ✓ Documentation and management of access rights
- ✓ No public IP, no changes to firewalls and routers, no port-forwarding needed

To master all these challenges HOOC offers secure and surprisingly simple solutions for engineers, managers and users.



The functional principle

The HOOC Gateway establishes an encrypted connection to the HOOC Cloud and terminates in a virtual and fully isolated network hub. When logging into the HOOC Cloud every user is assigned specific access rights. Thanks to the HOOC App, users can now establish a VPN tunnel from their end device to the remote network and be on-site with just a click.

Also using its scalable platform capabilities the HOOC Solution offers a series of innovative services, which all work according to the same principle.



HOOC Gateway

The HOOC Gateway establishes a secure connection between remote IT systems and the HOOC Cloud.



HOOC Cloud

The HOOC Cloud is the heart of the HOOC Solution and offers easy management of all your assets and a series of centralized services.



HOOC App

Thanks to the HOOC App for Windows, iOS and Android, the services of the HOOC Cloud can be easily and quickly accessed at any time and from anywhere.

THE HOOC GATEWAYS

The HOOC Gateway links remote systems and the HOOC Cloud together. On delivery, it is preconfigured and ready for operation. After connecting to the internet, the HOOC Gateway registers at the HOOC Cloud and establishes a VPN connection using 256-bit AES encryption.



HOOC GATEWAY WITH WLAN & MOBILE COMMUNICATION

HOOC CONNECT M

Simply plug in, log in and start. HOOC Connect M is the powerful Swiss multitool and covers a wide range of use situations. The Connect M Gateway offers numerous communication interfaces such as LTE/mobile communication, WLAN, WAN and LAN ports.

HOOC Connect M is suitable for:

- ✓ Temporary use during commissioning
- ✓ Connection of systems without internet access
- ✓ Access to industrial systems
- ✓ Access to isolated networks



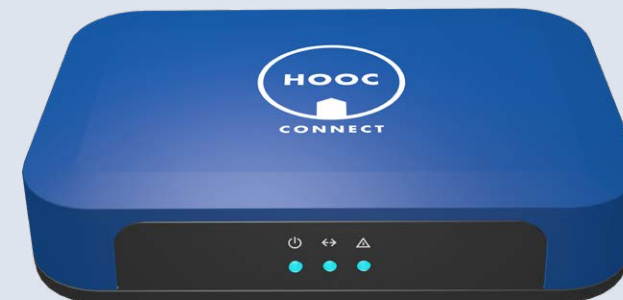
HOOC GATEWAY RAIL MOUNT

HOOC CONNECT H

HOOC Connect H fits perfectly into control cabinets or, due to its rail-mounting enclosure, to all electrical distribution systems in the building technology industry. This is our bestseller and has already been proven in thousands of remote sites.

HOOC Connect H is suitable for:

- ✓ Remote maintenance and access to smart homes
- ✓ Remote maintenance for HVAC control
- ✓ Applications in control cabinets



HOOC GATEWAY FOR IT RACKS

HOOC CONNECT T

HOOC Connect T is the perfect solution for use in an IT rack. Simply plug in, log in and start. The Connect T Gateway can be used everywhere networks or an IT rack are in place. Thanks to the included power supply, it is ready to use within one minute.

HOOC Connect T is suitable for:

- ✓ Remote maintenance of network infrastructure
- ✓ Remote access for small offices
- ✓ Remote maintenance of safety and security systems



HOOC FOR MANUFACTURERS AND DEVELOPERS

HOOC CONNECT E

The embedded software HOOC Connect E can be downloaded as binary or docker container from the HOOC Cloud and used on various platforms (Raspberry PI, Linux, MAC). Using HOOC Connect embedded, manufacturers and developers can integrate the HOOC Solution into existing systems and products.

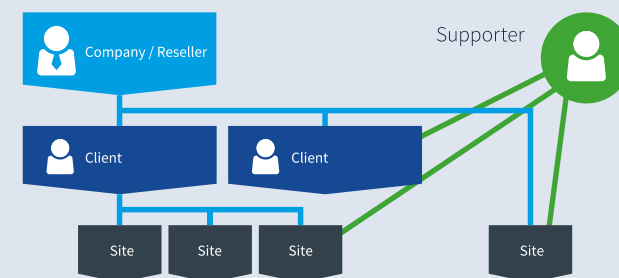
HOOC Connect E is suitable for:

- ✓ Integration in existing control systems
- ✓ Integration in own hardware or products
- ✓ Integration in server environments



THE HOOC CLOUD

The HOOC Cloud is a central part and the core element of the HOOC Solution. Here resellers, users, sites and supporters are registered and managed. It's also the place where all connections run together, access rights are granted and central services are activated. Using the management platform opens up the full potential of the HOOC Cloud.



For this reason the HOOC Cloud meets the highest expectations (equal to Swiss banks security policies) regarding data protection and infrastructure. We continuously implement and provide new functions and features to assure quality and innovation. We put special emphasis on high availability and security of all machinery and services managed on the platform.

- ✓ Certified and monitored Swiss data centres (ISO and Finma compliance)
- ✓ Automated processes for updates and disaster recovery
- ✓ Encryption of all connections using modern state of the art technologies
- ✓ Recording and monitoring of access
- ✓ Regular audits by independent external companies (See Infoguard penetration testing report)

The HOOC management portal is a central part of the HOOC Cloud and provides the following functions:

- ✓ Central management of all resellers, clients and sites
- ✓ Hierarchical user management and access rights
- ✓ Provisioning and logging of temporary remote access rights
- ✓ Monitoring of HOOC services and server resources
- ✓ Provisioning of central applications
- ✓ Two-factor authentication

At regular intervals we provide new and improved features for the HOOC Solution.

Maintenance is planned in a timely fashion and announced in the HOOC Management Portal. Beside the current status of the HOOC Cloud and services the latest events are also provided for later viewing.

THE HOOC APP

The HOOC App is an innovative and user-friendly software solution. With just one click, a secure connection is established, the status of a system is checked, parameters are changed and information on the latest status messages can be obtained.

The crucial functions of the HOOC App:

- ✓ VPN sessions to remote sites
- ✓ Push notifications and message centre
- ✓ Auto-login and auto-connect features
- ✓ Remote control and alerts



HOOC APPLICATIONS

INSTALL, LOG IN AND GET STARTED

REMOTE ACCESS

In less than two minutes our secure, modern, efficient and scalable HOOC Solution for remote access will be ready for operation. Simply connect the HOOC Gateway to the network on site, register it at the HOOC Cloud and use the HOOC App to establish a secure VPN tunnel to the remote network as you would expect of modern remote maintenance.

As well as being user friendly HOOC offers a large variety of innovative functions. For example, there is no limit to the number of managed sites or networks. Thanks to hierarchical authorisations you will always stay on top of things and ensure targeted assignment of access rights.

By means of the access log accesses can be seamlessly tracked and automatic notifications of every login can be configured as necessary.

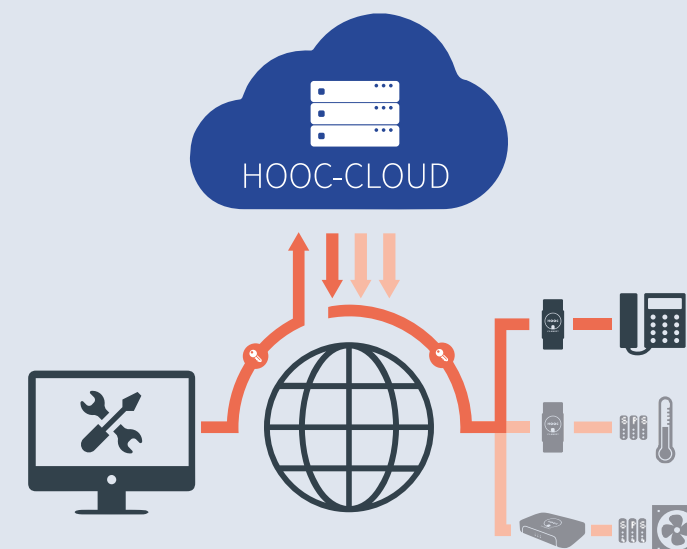
Further information



YOU TOO CAN BENEFIT FROM THE HOOC SOLUTION.
HOOC MAKES THE BEST OUT OF IT.

Key features:

- ✓ Plug & Play VPN with 256-bit AES encryption
- ✓ Uniform and easy management of systems and access rights
- ✓ Certified Swiss data centres
- ✓ HOOC App for various platforms (Windows, iOS, Android)
- ✓ No public IP, no port-forwarding, no firewall settings needed
- ✓ Two-factor authentication

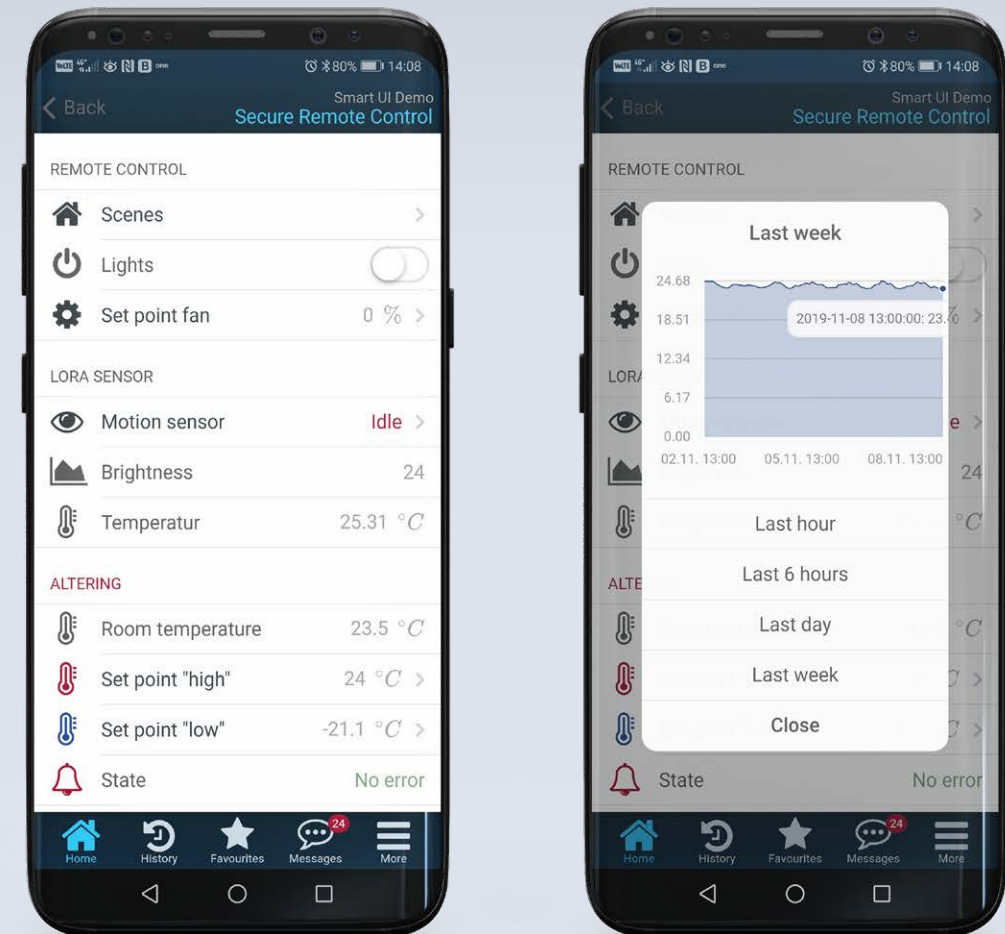
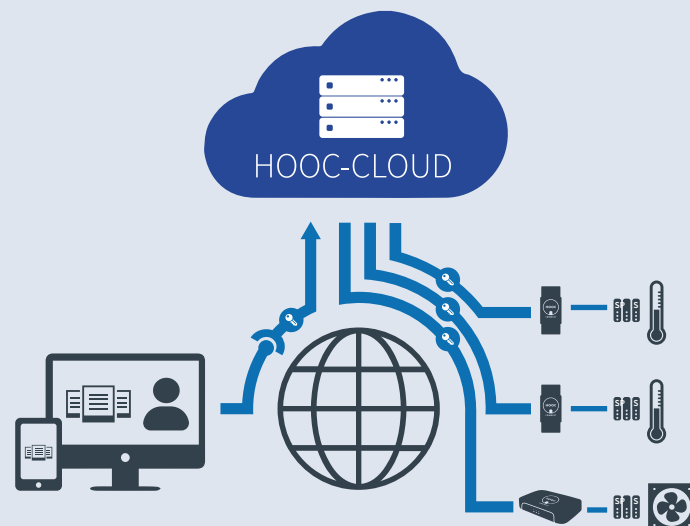


CONTROL OVER FIELD-LEVEL DATA AT ALL TIMES

REMOTE CONTROL

Thanks to the HOOC Secure Remote Control Service, PLC control systems, remote, gateways and sensors can be remotely controlled and monitored in real-time. Data points are registered with a few clicks and are directly available in the HOOC App. This information can be seen and changed by all

authorised users. Owners and building managers for example, can request the current status at any time, view trend data or change set-point values and switch statuses as required.



Possible applications include:

- ✓ Simple visual illustration of field-level data
- ✓ Adjustment of set-point values for heating, ventilation or AC systems
- ✓ Remote control of remote IO's
- ✓ Remote control of heating systems in vacation homes
- ✓ Integration of external systems
- ✓ Supported protocols: Modbus TCP/IP, KNX/IP



EASILY CONNECTED

VIRTUAL NETWORK

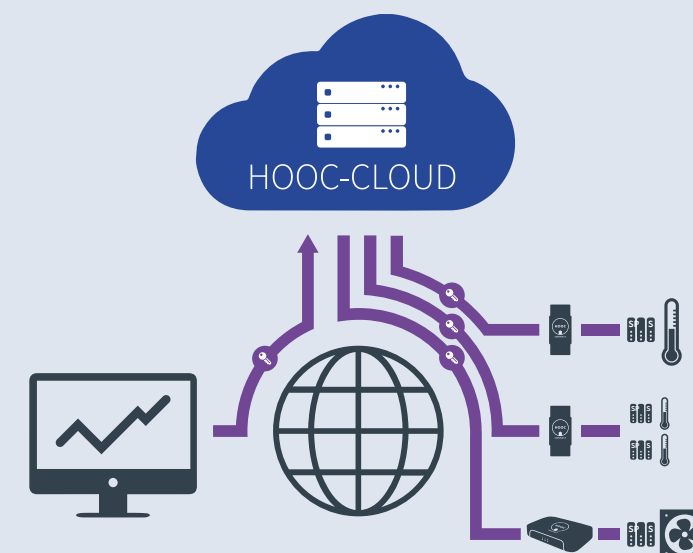
The HOOC Network Interconnection Services provide a simple solution for permanently connecting your systems and networks across multiple sites. Use the internet as your private virtual data highway. HOOC Network Interconnection Services are managed for all sites within seconds using the HOOC Cloud.

HOOC Network Interconnection Services are distinguished between layer-2 and layer-3 networks. Layer-2 network interconnections ensure easy and secure communication between all IP end devices at the included sites. Layer-3 network interconnections enable communication between a centralised IP device with multiple IP devices at distributed remote sites no matter what the existing network infrastructure actually looks like.

BUILD YOUR OWN VIRTUAL NETWORK

Possible applications:

- ✓ Permanent layer-3 network connections of any type of IP end devices at various sites
- ✓ Operation of central applications like SCADA systems
- ✓ Permanent layer-2 network connections of various sites
- ✓ Operation of DDC Systems at various sites
- ✓ Site to Site VPN Connections



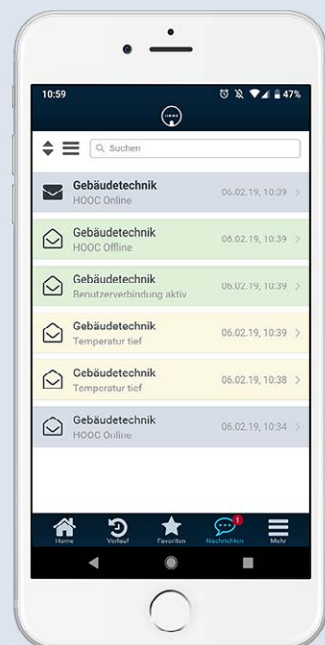
PROACTIVE REACTION TO FAULTS ALERTS

It is winter and the heating system fails. This is usually only noticed by you or your clients after the temperature in rooms has already dropped. HOOC Alerts help to recognise faults in real-time. Thanks to e-mail and push notifications you are informed within seconds to take proper action without any delay. Whether heating or industrial systems – recognise any issues before they become serious.

WORLD CLASS SERVICE THANKS TO HOOC ALERTS.

Functions:

- ✓ Monitoring of technical infrastructure
- ✓ Monitoring of field-level data
- ✓ Monitoring of remote access
- ✓ Monitoring of VPN connection states
- ✓ Alert via push message
- ✓ Alert via e-mail

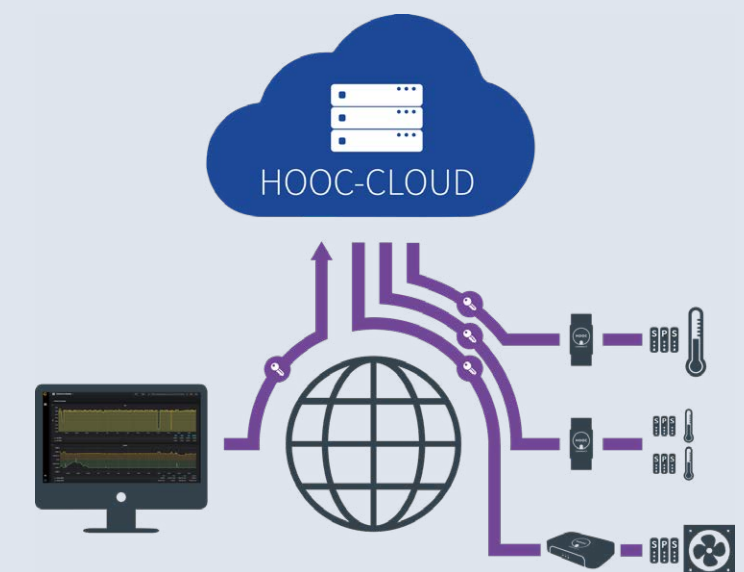


DATA IS THE NEW GOLD MONITORING

Knowledge is power. This is also true for the use of control systems in industrial and building technology. To have the necessary knowledge at any time, ways and means to obtain field-level data must be applied. In the HOOC platform, field-level data is harmonised and the Grafana plug-in offers a first-class monitoring system. Grafana is a powerful and open platform for analytics and monitoring in the field of IoT. With user-friendly web access, illustration of trend data and exports to CSV or JSON files, you gain reliable and valuable monitoring tools.

Functions:

- ✓ Trend data acquisition
- ✓ Data export to CSV or JSON files
- ✓ Web access to trend data
- ✓ Monitoring and alerting
- ✓ Easy set-up of dashboards





MAKE YOUR IDEA OUR CHALLENGE

INDIVIDUAL SOLUTIONS

There are many good ideas. Hardly any are put into practice. From the idea to the ready solution, it is often a long and rocky road. Daily business often leaves no time to drive innovation. Do you need support in putting new solutions into practice?

WE WOULD BE PLEASED TO ASSIST YOU.

OPTIMISATION OF PRIVATE ENERGY CONSUMPTION

Thanks to innovative network connection technology and know-how in field applications, HOOC AG supports the optimisation of the energy supply in private property. As the owner of a photovoltaic installation, for example, you benefit from the direct use of energy generated on your roof to local heat accumulators. This way you save money and gain independence.

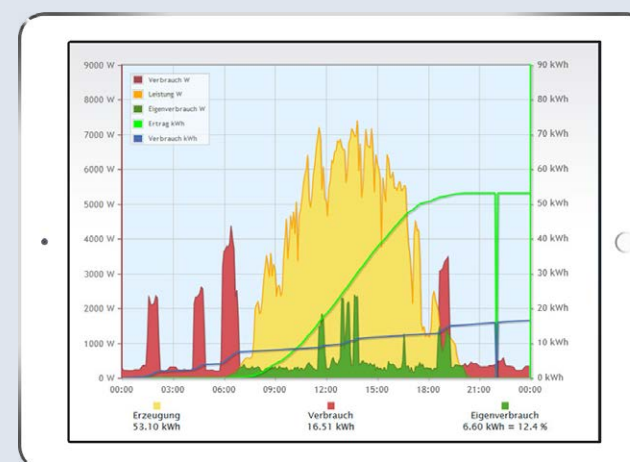
The figure illustrates the energy consumption before installation of the HOOC Solution:

Red: Heat pump energy consumption
Yellow: Generated solar power

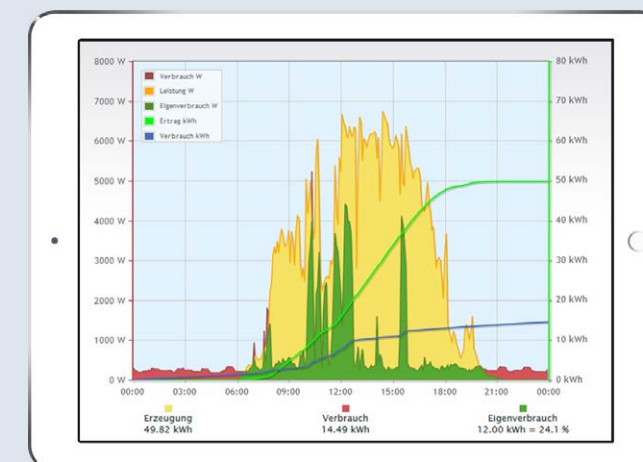
ACQUISITION OF PROCESS DATA

Real-time data acquisition of process data from remote controls and systems is a crucial requirement and a major part of planning engineers and building owners. In general, this is realised by means of a control system on site. This automatically leads to questions like: How do I access the data? In which format is the data provided? How long is the data saved? ...

In the HOOC platform, field-level data is harmonised and the Grafana plug-in offers a first class monitoring system. Grafana is a powerful and open platform for analytics and monitoring in the field of IoT. Thanks to user-friendly web access including illustration of trend data and exports to CSV or JSON files, a wide range of applications become available.



without HOOC



with HOOC



GET THE MOST OUT OF IT PRODUCT SERIES

Whether remote access, alerts or monitoring – we have the perfect solution for any challenge. To get the most out of HOOC for you and your clients, we offer different licences and packages with various services.

FIND YOUR PERFECT SOLUTION:



STEP 1
Define the
HOOC Licence



STEP 2
Select a
HOOC Package



STEP 3
Choose the
HOOC Gateway

THE PRODUCT SERIES

The HOOC Licences are uniquely defined according to requirements and the number of systems to be managed per reseller or client account. The licence types Standard, Business and Premium are defined according to the number of managed systems and the respective application.



FREE

STANDARD LICENCE

The standard license is automatic when registering as reseller. It enables free usage of the standard functions of the HOOC Cloud and the HOOC App. There are no limitations regarding the number of systems and supporters. The standard license is the perfect choice for remote access to control systems in industrial and building technology.



BUSINESS LICENCE

The business license includes all the functionality of the standard license with additional access to valuable services in the HOOC Cloud. The business license is the perfect choice if network interconnection of various systems and sites, remote control and alerts as well as field-level data monitoring is required in addition to remote maintenance.



PREMIUM LICENCE

The premium licence offers the full potential of the HOOC Solution. From remote access over remote control, network interconnection and alarm notification down to recording and analysis of trend data, everything is included. With this tool set you are the perfect partner for your clients to master the digital transformation in building technology. Become a part of the digital future.

		S	M	L	S	M	L	S	M	L
Secure remote access	Simultaneous connections	1	3	10	1	3	10	1	3	10
	Up- Download bandwidth (Mbit/sec)	1	5	10	1	5	10	1	5	10
	Duration of client and gateway connection logs	3 Months			3 Months			3 Months		
	Virtual DHCP server usable	✗		✓	✗		✓	✗		✓
	Security features usable	✗		✓	✗		✓	✗		✓
	Redirection management usable	✗		✓	✗		✓	✗		✓
	Two-factor authentication		✓			✓			✓	
Secure remote control	Secure remote control service usable	✗		✓		✓			✓	
	Number of protocols	-	2	5	1	2	5	1	2	5
	Number of data points per protocol	-	50	100	1	50	100	1	50	100
	KNX Monitoring (Bus occupation and telegrams)	✗		✓		✓			✓	
	Duration of data point logs	✗	1 Day	1 Day	1 Month			6 Months	12 Months	24 Months
	Duration of data log KNX monitor	✗	1 Month	1 Month	3 Months			6 Months		
	Number of REST requests per month	-			-			-	100k	1000k
	In-app visualisation and remote control active	✗		✓		✓			✓	
Secure proxy	Secure proxy service usable		✓			✓			✓	
	Number of links/mappings	1	2	5	1	5	10	10	20	50
	Protocol http/s usable		✓			✓			✓	
	Protocol ssh and vnc usable	✗		✓		✓			✓	
	Branding Login Page	✗		✓		✓			✓	
Alerts	Alerts usable	✗		✓		✓			✓	
	Monitoring of VPN connections	✗		✓		✓			✓	
	Monitoring of data points		✗			✓			✓	
	Monitoring of KNX/IP device		✗			✓			✓	
	Duration of alert event logs	✗	1 Day	1 Day	1 Month			6 Months	12 Months	24 Months
	Number of alert rules	-	1	1	2	10	20	10	20	50
Reporting	Preparation of automatic reports		✗			✗			✓	
	Number of reports		-			-		1	5	10
	Number archived reports		-			-		1	5	10
Virtual network	Site to Site VPN	2 Sites			5 Sites			10 Sites		
	SCADA to Site Connections	2 Sites			10 Sites			30 Sites		

THE HOOC PACKAGES

HOOC Packages are distinguished by S(mall), M(edium) and L(arge). These packages respectively consist of functions from different services and meet various requirements regarding remote control systems and networks. The S package is optimised for user-friendly and secure remote access while the L package offers a large usable bandwidth and several simultaneous connections. Depending on the selected HOOC Licence, additional functions are unlocked for specific services.

HOOC SERVICES

Secure remote access (SERA)

Secure remote access includes all functions required for remote access in one service.

Security features

Freely configurable rules for network traffic restrictions.

Two-factor authentication

Proof of identity of a user by combination of two different and particularly independent components.

Secure remote control (SERC)

Secure remote control includes all services used for illustration and control of field-level data points.

REST

REST is a standardised interface for distributed systems and particularly web-services.

Secure proxy (SEPROX)

Secure proxy includes all functions for browser-based access to remote websites and computers.

Site network interconnection (SENEC)

Service for permanent network interconnection of sites equal OSI layer-2.

System network interconnection (SEDIC)

Service for permanent network interconnection of systems and controls equal to OSI layer-3.

ORDER NUMBERS

LICENCES



FREE

STANDARD LICENCE

included without recurring fees



BUSINESS LICENCE

Order no. 748200



PREMIUM LICENCE

Order no. 748202

We would be pleased to prepare an offer according to your requirements.

HOOC PACKAGES



Description	Order no. Europe	Order no. USA	Order no. Asia
Connect M LT S	522236	522260	522266
Connect M LT M	522246	522262	522268
Connect M LT L	522256	522264	522270



Description	Order no.
Connect H LT S	522232
Connect H LT M	522242
Connect H LT L	522252



Description	Order no.
Connect T LT S	522234
Connect T LT M	522244
Connect T LT L	522254



Description	Order no.
Connect E LT S	522230
Connect E LT M	522240
Connect E LT L	522250

UPGRADES

	Package S	Package M	Package L
Description	Order no.	Order no.	Order no.
SERA LT	746202	-	-
SERA LT PRO	-	746200	-
Package S	-	746204	746208
Package M	-	-	746206

**SWITZERLAND**

HOOC AG, Torweg 8, 3930 Visp
Phone +41 (0)27 948 46 00
www.hooc.ch, info@hooc.ch

GERMANY

HOOC GmbH, Fontanestr. 21a, 15366
Neuenhagen bei Berlin
Phone +49 3342 252055
www.hooc.gmbh, info@hooc.gmbh

AUSTRIA

HOOC AUSTRIA,
Kelterweg 8, 6832 Sulz
Phone +43-660-6798789
www.hooc.at, sales@hooc.at