

Elegant terminals for  
IP door communication.



- Voice and image
- High quality aluminium metal housing
- State-of-the-art VoIP technology
- Use of existing networks



## 01 Questions about IP and SIP ?

The transmission of voice and images over the Ethernet and by IP is increasingly replacing analog and ISDN-based transmission technologies.

The voice communication and image are converted into digital signals and are then transported over the IP network in a specific protocol such as **SIP**.

Apart from SIP, systems are also in use with the **H.323** protocol. In extremely simplified terms, this method can also be called ISDN over IP. However, it requires very powerful hardware and has several disadvantages relating to firewalls and network integration.

Baudisch IP intercoms solely support the sustainable SIP protocol. SIP is directly implemented in all devices with the necessary Ethernet interface, other adapters or converters are unnecessary.

This creates substantial advantages, especially in companies which already have IT networks and structured cabling. Existing IT resources can be used; there is no need for an additional cable network.

Where there is no cable connection, intercoms can be operated over **W-LAN** (IP radio link).

Other devices such as specific exchange or switchboard technology, storey distributors or interface modules are also unnecessary.

The following options are available for switching calls:

- Direct connections:  
Door intercom - PoE switch - IP phone  
For the simplest applications, for example in a house. The intercoms call the IP address of an IP phone directly.
- Public SIP provider  
Door intercom and IP phone are switched, free of charge, via a public SIP provider (internet access and at least on DSL connection required). Transfers from SIP to the fixed and mobile phone network are offered on favourable terms. This makes the door intercom a worldwide telephone. Even switching functions, e.g. the door opening, can be carried out while on the road.
- Local SIP server (software solution, available as freeware)  
This software can be run on any PC. For example, the 3CX freeware runs directly on a Windows server. Alternatively, Asterisk is frequently installed on a Linux PC.
- IP phone systems  
Many phone system manufacturers offer complete IP based systems. Our door intercoms can also be directly connected there. A current compatibility list is available on request.

Baudisch.SIP DoorStation  
IP54 Standard Version



Baudisch.SIP DoorStation  
IP54 Video Version





### 02 Baudisch.IP Terminal

The IP terminal is found in the field of modern architecture.

The common up to date wall installations of intercoms or call buttons are replaced with an elegant free-standing column.

Where in the past extensive cabling work was necessary for communication columns, today a single Ethernet port with an 8-pin network cable is sufficient for the functionality of the column.

The new technology of SIP voice communication with IP video allows this plug & play solution.

The solution shown in the pictures has the following components:

- Baudisch.IP Terminal  
Stele KSF CNC-processed, with floor flange including mounting kit and front panel, info module with LED background illumination, dummy front panel for future expansion, installation kit for SIP DoorStation, completely pre-installed.  
Article number: [33-1131](#)
- Baudisch.SIP DoorStation IP54 video  
Article number: [33-0212](#)
- Transponder reader ID5 vario  
Article number: [36-0150S](#)

Mechanical basis for this solution are columns of the KSF series from Siedle.

In order to allow a flush-fit installation of the SIP DoorStation IP 54 video, a special installation kit is used in conjunction with factory-made CNC modifications to the columns.

In addition to the quick plug mounting on the front of the panel, this installation kit also enables the anti-theft protection of the intercom through a internally mounted padlock.

Also a sabotage detector can be used. By opening the column, a signal is triggered to higher-level systems or the LAN secure adapter. This in turn switches off the power supply and the network cable.





Licht aus  
Spot an

Baudisch.IP Terminal  
Version with  
transponder reader



# Baudisch.SIP DoorStation

## IP54 Standard Version



### 03 Features of all versions

The Baudisch.SIP DoorStation is a door intercom with internal loudspeaker, hands-free microphone and a 2-line display with background illumination.

The device is the ideal solution, if in addition to a central office alternatively also additional participants must be selectable ( central call can be dialled directly with the right button ).

For this purpose, the device includes a phone directory with up to 100 entries. The pre-selection of an entry is made using the two arrow buttons on the left, the call is made using the button on the right.

Other advantages:

- Fast call setup and a loud replay with very good quality, priority of voice from phone to intercom.
- Door opening using individually selected codes.
- Simple configuration via the in-built web server which is pre-installed in a required language version (German, English, French, Italian).
- Compact design, mounting on the wall with internal cable connection.
- Exquisite, solid housing of brushed aluminium



### 04 Technical data IP54 standard version

Operation:	central call button, 3 buttons, illuminated LCD display
Connections:	LAN over RJ45 or terminals, push-fit screw terminal for alternative power supply, 2 switching relays ( door opener + light ), as well as 4 direct call buttons. Serial interface TTL via ribbon cable connector.
CE mark:	EMC to 2004/108/EG, EN50081-1 / EN55022
Temperature range:	-20 °C to +55 °C ( -20 °C after 15 minutes running time )
Protection class:	IP54
PoE supply:	class 2, endspan or midspan
Operating voltage:	24 VDC as an alternative to PoE supply
Power:	maximum 4 VA
Colour / Material:	Housing of brushed aluminium, light anodised
Dimensions:	99.0 x 198.5 x 38.3 mm
Weight:	900 g
Article number:	<a href="#">33-0210</a>

## 05 Additional features video version

This door intercom has all the advantages of the SIP DoorStation IP54 standard and is additionally equipped with the Baudisch.CP-CAM - the compact IP colour camera. This camera provides high-quality video colour images which are available via Ethernet ( MJPEG, JPG ).

- 2.5 mm vision lens with a horizontal viewing angle of 83°.
- 6 built-in IR spotlights guarantee good lighting at night.
- Integrated switch with PoE input: The connection and power supply for the intercom and video is therefore over a single LAN cable possible. That significantly reduces the installation costs.
- Display of the colour videos in the standard web browser, also several PCs in the network simultaneously. Further additional components are therefore unnecessary.
- Support of the pop-up software Baudisch.VideoClient for automatic display of the video image by an incoming call.
- Simple configuration of the camera via built-in web server.



## 06 Technical data IP54 video version

Technical data like IP54 standard version, in addition:

Picture: colour picture 640 x 480 ( VGA ), digital zoom of cutouts, switchover video/single picture ( MJPEG,JPG ), adjustable compression rate, display in 90° steps pivotable .

Night operation: automatic switchover to black & white operation at night, IR illumination switching on threshold adjustable

Power: maximum 9 VA ( PoE class 3 )

Dimensions: 99.0 x 298 x 38.3 mm

Weight: 1.500 g

Article number: 33-0212



## 07 Installation kit with sabotage contact

Spring switch on PCB with screw terminal for mounting in the rear wall of the housing. Can also be retrofitted by the customer.

Article number: 33-0215





## 08 Connecting external call buttons

The SIP DoorStation has an 8-pin push-fit screw terminal for direct connection of 4 buttons ( dry contacts ). This allows direct calls to be triggered.

Since these 4 inputs are binarily coded, up to 15 direct call buttons can be connected with appropriate wiring. 15 additional entries in the phone directory are therefore possible in the web server software.



## 09 Serial interface

A ribbon cable connector provides a serial interface ( TTL ) and a voltage ( 5V, 3,3V ) for accessory components.

The possible applications of this interface for OEM projects are:

- Dial pad to dial a free phone number or to enter a PIN code to release the door opener by company employees.
- External transponder reader to use the IP connection of the intercom.



## 10 SIP DoorStation IP54 ECO

For implementation of simple applications, a SIP DoorStation with one call button without display is sufficient - both arrow buttons and display are omitted in the production.

The software interface of this model is not different from the basic version.

Article number: [33-0210E](#)



## 11 OEM electronic kit without housing

The electronic assemblies of the SIP DoorStation are individually deliverable for specific installation projects and OEM series solutions.

This allows OEM users to design specific housing and installation versions.

The basis for this is a technical fine-tuning with the Baudisch development in order to ensure, even in these cases, a first class standard-compliant product quality.



## 12 Configuration via web server

Both the Baudisch.SIP DoorStation and the Baudisch.CP-CAM provide numerous adjustment options and functional features for the user.

To achieve this, both systems have built-in web servers, which can be reached from any PC in the network via the web browser.

The web servers can be installed in different languages (German, English, French and Italian) - this makes starting up and maintenance considerably easier.

In addition, the web interface has also been developed in-house by Baudisch. The quality of the interface is therefore clear and "European", clearly distinguishing it from imported products. All dialogs are of course protected by a user password.



## 13 Functions of the Software

Phone directory: 1 central call number, 100 entries to scroll, 15 direct calls

Call logic: Parametrised call redial if destination unavailable and call forwarding to other destinations in the same group.

Announcements: 2 individual wave files can be installed for call identification (the person called therefore hears from where the call has come) and as ringing tone (playback at the loudspeaker and to the caller).

Door opening: DTMF suffix dialling, code for each call destination can be set separately.

SIP Codecs: iLBC, Speex, PCMU, PCMA, GSM 6.10, G.726-32

Bootloader: The whole software can be updated over IP.

UDP status: A UDP status message cyclically displays the operating status and the call number of the respective distant end. This acts as an interface for building management systems and to control the video pop-up software.



## 14 Compatibility

The Baudisch.SIP DoorStation has been tested to date with the following system solutions and is compatible with their software:

- Sipgate.de
- 3CX Free Edition
- Asterisk
- accessVoIP
- Asterisk Cluster
- FOXFON
- easyPBX
- Swyx
- Siemens HiPath, Open Office
- Octopus NetPhone
- Starface
- telpho10





## 15 LAN secure adapter

### Safeguarding of outdoor IP supply cables of cameras and intercoms

When IP components are installed in public areas it is necessary to ensure that in the event of sabotage, it is not possible to access data in the company's Intranet via the external network cable.

This is achieved by installing the LAN secure adapter between the camera and the network (switch) in conjunction with a sabotage contact in the housing of the intercom or in the camera installation site.

The adapter monitors up to two sabotage contacts for interruption, short-circuit and current differences according to the closed current loop principle. In the event of irregularities, the device triggers a sabotage alarm.

In case of sabotage the network cable is completely isolated. Another output enables a fault signal to be sent to the building services control system and the power supply to outdoor devices to be switched off.

The sabotage shutdown must be reset by pressing a button at the LAN secure adapter.

Operation: Triple LED status display and reset button.

Connections: 2 RJ45 sockets for network input and output.  
Push-fit screw terminals and LSA+ (parallel) for power supply, 2 sabotage loops and a switched voltage output 24V DC.

CE mark: EN55011, EN50081-1

Temperature range: 0 °C to +55 °C

Protection class: None, open sub-assembly for control cabinet installation

Operating voltage: 24 VDC are required, PoE supply is not possible, supply via a UPS is recommended.

Dimensions: 110 x 85 x 50 mm

Weight: 120 g

Article number: 33-0216



## 16 Mounting frames and installation kits

The Baudisch.SIP DoorStations can be mounted directly on a flat surface without any external elements. The cable entry is carried out at the back and is covered by the device.

Information about frames and installation kits for flush mounting are available on request.

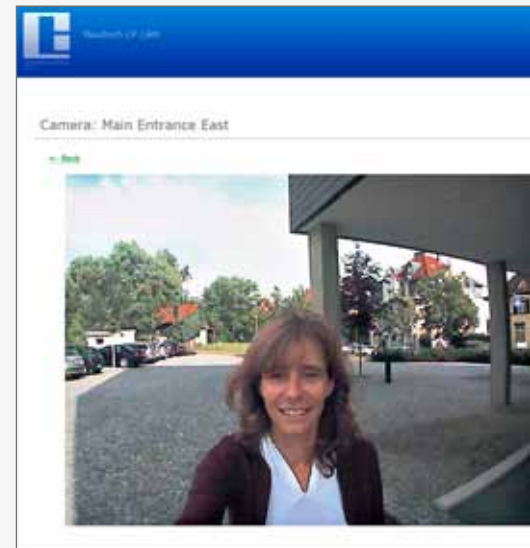
## 17 Video display in the web browser

The video data of the Baudisch.CP-CAM can be called up directly via the IP network, independent of a voice connection or the SIP server. This is a major advantage.

The coloured video images can be viewed in several places in the network (including simultaneously) via the web browser, without any additional components. It is only necessary to release a Java plug-in.

If necessary, a protected access with password protects the camera images against unauthorised viewing.

Worldwide access to the camera images is possible if the user's network has an appropriately configured router.



## 18 Baudisch.SIP VideoClient

As an alternative to video display in a web browser, this software enables automatic display (pop-up) of the door video image on the screen.

With the incoming call, the image of the matching Baudisch IP camera is immediately displayed at the called workstation PC - which saves the user having to manually start the display and to manually select the camera.

The door can be opened by clicking a button displayed on the screen.

It is also easily possible to directly save individual frame images as a JPG file on the hard disc with a click or even automatically when the door is opened.

Article number: 36-0213



## 19 SNOM IP telephone with TFT display

With the desktop phone snom 820/ 821/ 870, the video image of the CP-CAM can be directly displayed in the phone display.

The image of the required camera can be connected at any time using the phone's speed dialling keys. If the SIP server has a suitable function or in case of direct configuration without SIP server, this is also possible automatically in the call state.

A suffix dialling code at the snom phones can of course also be used to trigger the switch output for opening the door in the SIP door module during a call.

Detailed information and application notes are available on request.







Baudisch Electronic

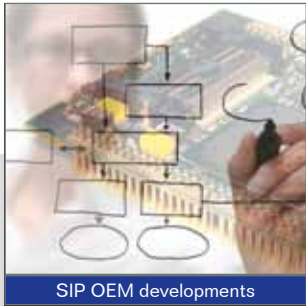
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SIP door communication



SIP OEM developments



IP video door cameras



RoomControl - door nameplates



Visitor Communication Panel



RFID access control

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