

	IP61	IP64 (new)
		
Physical	<p>Size: 133 x 53 x 24 mm</p> <p>Colour: Black</p> <p>Display: FSTN B/W 28 x 35 mm 112 x 115 pixel White LED backlight</p>	<p>Size: 137 x 52 x 21.5 mm</p> <p>Colour: Black</p> <p>Display: High resolution Colour LCD display 28 x 35 mm 1,8 inch White LED backlight</p>
Buttons & Keys	<p>3 function keys</p> <p>On hook, power on / hook off</p> <p>4 direction navigation</p> <p>Numeric block</p> <p>Volume + and -</p> <p>Ringtone on / off</p>	<p>3 function keys</p> <p>On hook, power on / hook off</p> <p>4 direction navigation</p> <p>Numeric block</p> <p>Volume + and -</p> <p>Ringtone on / off</p>
Battery	<p>Type: Li-Ion</p> <p>Speech time: 16 h</p> <p>Charge time: <4 h</p>	<p>Type: Li-Ion</p> <p>Speech time: 16 h</p> <p>Charge time: <4 h</p>
Interfaces	Headset interface (Standard 2.5 mm)	Headset interface (Standard 3.5 mm)
Radio	<p>Frequency range: 1880-1900 MHz</p> <p>Modulation: GFSK</p> <p>Antenna: Integral</p> <p>Sensitivity: -93 dBm</p> <p>Dynamic output power: 10 mW (EU)</p>	<p>Frequency range: 1880-1900 MHz</p> <p>Modulation: GFSK</p> <p>Antenna: Integral</p> <p>Sensitivity: -93 dBm</p> <p>Radiated power: 250 mW (EU)</p>
Environmental	<p>Operating temperature: 0°C to +40°C</p> <p>Storage temperature: -20°C to +60°C</p> <p>Enclosure protection: IP40</p>	<p>Operating temperature: 0°C to +40°C</p> <p>Storage temperature: -20°C to +60°C</p> <p>Enclosure protection: IP40, IEC EN60529</p>
Order number	50-00061-001	50-00064-004

	IP63	IP65 (new)
		
Physical	<p>Size: 134 x 53 x 26 mm Colour: Black Display: CSTN, more than 65000 colours 28 x 35 mm 128 x 160 pixel White LED backlight</p>	<p>Size: 137 x 52 x 21.5 mm Colour: Black Display: TFT 31 x 41 mm 240 x 320 pixel White LED backlight</p>
Buttons & Keys	<p>3 function keys On hook, power on / hook off 4 direction navigation Numeric block Volume + and - Ringtone on / off</p>	<p>3 function keys On hook, power on / hook off 4 direction navigation Numeric block Volume + and - Ringtone on / off</p>
Battery	<p>Type: Li-polymer Speech time: 20 h Charge time: <4 h</p>	<p>Type: Li-polymer Speech time without Bluetooth headset: 20 h Speech time with Bluetooth headset: 13 h Charge time: <4 h</p>
Interfaces	<p>Headset interface (Standard 2.5 mm) Bluetooth</p>	<p>Headset interface (Standard 3.5 mm) Bluetooth</p>
Radio	<p>Frequency range: 1880-1900 MHz Modulation: GFSK Antenna: Integral Sensitivity: -93 dBm Dynamic output power: 10 mW (EU)</p>	<p>Frequency range: 1880-1900 MHz Modulation: GFSK Antenna: Integral Sensitivity: -93 dBm Dynamic output power: 10 mW (EU)</p>
Environmental	<p>Operating temperature: 0°C to +40°C Storage temperature: -20°C to +60°C Enclosure protection: IP44</p>	<p>Operating temperature: 0°C to +40°C Storage temperature: -20°C to +60°C Enclosure protection: IP44, IEC EN60529</p>
Order number	50-00063-001	50-00065-001

innovaphone myPBX:

The Unified Communications client

The Unified Communications client myPBX from innovaphone is the ideal companion for users with high demands on their communication infrastructure. Their typical criteria: They are available around the clock, communicate a lot, sometimes with

multiple calls at the same time and initiate ad-hoc audio or video conferences. myPBX supports such frequent callers, bringing together their various communication channels under one unified application interface - in a clear, structured and user-friendly way.

With the myPBX web client, the user benefits from a variety of Unified Communications functionalities, such as traditional telephony, audio conferencing, company directories, connection logs, Presence information, instant messaging, collaboration sessions, desktop video telephony and video conferencing - no matter whether from the office, home office or on the road.

The myPBX functionalities in detail

Traditional and good | Telephone functions

With the Unified Communications client myPBX all traditional telephone functions are easily available for the user: dial, hang up, hold, park, 3-party conference, toggle, connect, set call diversions, pickup. The user can choose individually which device is to be controlled over myPBX because all of the devices that are set up in the innovaphone PBX for the respective user are available (e.g. office telephone, home office telephones, DECT phone, etc.).

Everything at a glance | Favourites list

The most commonly used contacts are clearly listed in various Favourites lists (E.g. Favourites list sales, marketing). You can easily add new contacts via an LDAP search. Because the Favourites are displayed with Presence information, you can



always see at a glance whether someone can be reached or not. It is also possible to trigger a call, start a chat, write an email or edit your Favourites with just one click directly from a Favourite.

Never busy again | Office integration

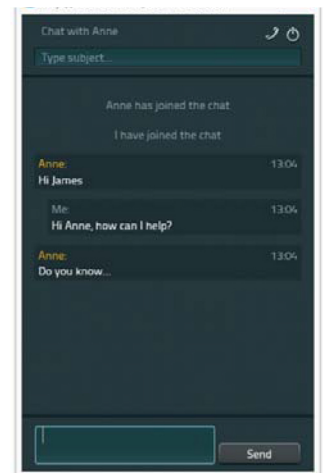
In myPBX, a drop-down menu can be used to show one's own Presence (present, absent, busy, lunch, do not disturb, vacation) and to add a descriptive note. Thanks to innovaphone's Office integration, various Presence information, which can have very different origins (e.g. myPBX, end device, Office/Outlook calendar), is bundled to a single Presence information and displayed in a clear and understandable way for the users in all these applications - also in the myPBX, Unified Communications client. Any change in availability is updated in real time in all applications.

Find your destination quickly | LDAP search

A search field in myPBX can be used to look for contact information via an LDAP database. It is possible to display further information on a contact from each search result simply by clicking on the relevant Info icon (address, email address, position etc.) There is also the possibility of sending this contact information via email to someone, to call the person directly, or to add the contact information to your Favourites list.

Flexible exchange of information | Chat plus Collaboration

Short questions can be resolved at any time via chat. To do this, just invite one or more subscribers via the Favourites list or LDAP search to join the chat by clicking on the Chat icon. At the beginning, a topic of conversation can be determined. myPBX informs the user as soon as someone enters or leaves the chat. It is also possible to invite many more participants to join an existing chat. A few clicks are all it takes to easily set up collaboration sessions directly from myPBX with the help of appropriate application sharing software (e.g. GoMeetNow, WebEX, etc.) Collaboration sessions can be used to discuss documents or applications.



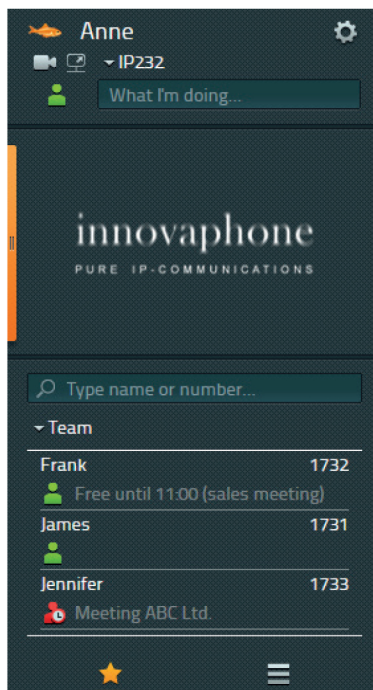
Don't miss anything anymore | History list

All incoming and out-going calls are clearly listed in the myPBX History list. You can also call a contact, add contacts to a Favourites list or start a chat directly from the History list. Any missed incoming calls are indicated with an icon in the History list. You can track exactly what happened to a call using the detailed information. Was the call answered by the operator? Did the operator try to put the call through again? etc. If a group call has been missed and

innovaphone Office Integration:

An overview of all Presence information

To simplify everyday communication and collaboration in a company, it is helpful to keep an eye on the Presence status of colleagues or business partners - no matter what device or application is being used. This makes it easy to avoid unnecessary work.



With the innovaphone Office integration, all Presence information is available in the myPBX innovaphone Unified Communications client, on the innovaphone IP phone as well as in all MS Office applications. Colored Presence icons and additional Presence notes provide the user with a perfect overview of who is currently busy, away or available.

Optimizing reaction times between colleagues and business partners is another advantage of the innovaphone Office integration. The user has the possibility to choose the most suitable means of communication in line with the

Presence information indicated: if colleague Mr A is available: call. If colleague Mr B is absent or on vacation: email. If colleague Mr C is on the phone:- brief chat request. Thus, communication does not hold you up, but is fun and saves valuable time.

Presence everywhere fully automatic and in real time

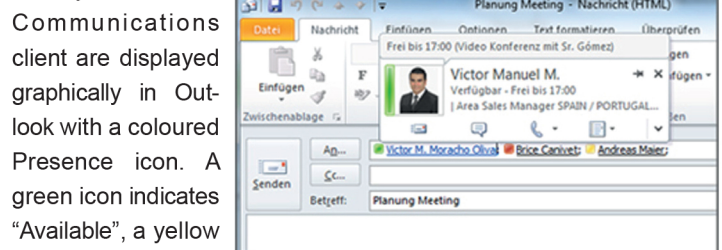
The innovaphone Office integration processes all Presence information from a variety of sources of information. Presence information that has been set in the innovaphone PBX, provided by the Unified Communications client myPBX or the VoIP telephone as well as all pending appointments in the Outlook calendar are all relevant.

What is special about the innovaphone Office integration: Presence is updated fully automatically and in real time - without any further intervention by the user. As soon as just one piece of Presence information changes, it is adjusted everywhere - in the myPBX Unified Communications Client, in all Office applications and even on the VoIP phone.

The freely configurable display period of Presence note is another special feature of the innovaphone Office integration. If an "available" contact has an appointment in the next few hours, this entry is shown as a Presence note in all applications. The default setting of the period shown is 36 hours. However, this can be changed by the administrator at any time.

Presence information in Outlook

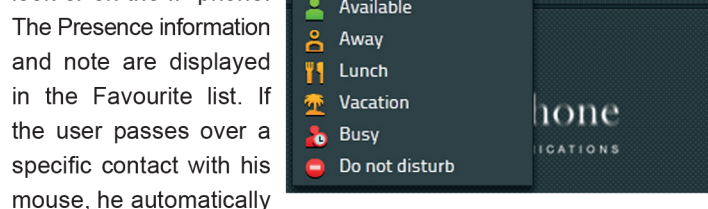
All of the Presence information on the IP phone and in the myPBX Unified Communications client are displayed graphically in Outlook with a coloured Presence icon. A green icon indicates



"Available", a yellow icon "Away" and a red icon "Busy". If the user passes over a Presence icon with his mouse, an additional window appears with the current Presence note. The user now has the opportunity to send an email directly from this window, to start a myPBX chat or to call the person intended.

Presence information in myPBX

A coloured icon also displays the Presence information on the myPBX unified communications client. It is irrelevant whether this information has previously been set as a calendar entry in Outlook or on the IP phone. The Presence information and note are displayed in the Favourite list. If the user passes over a specific contact with his



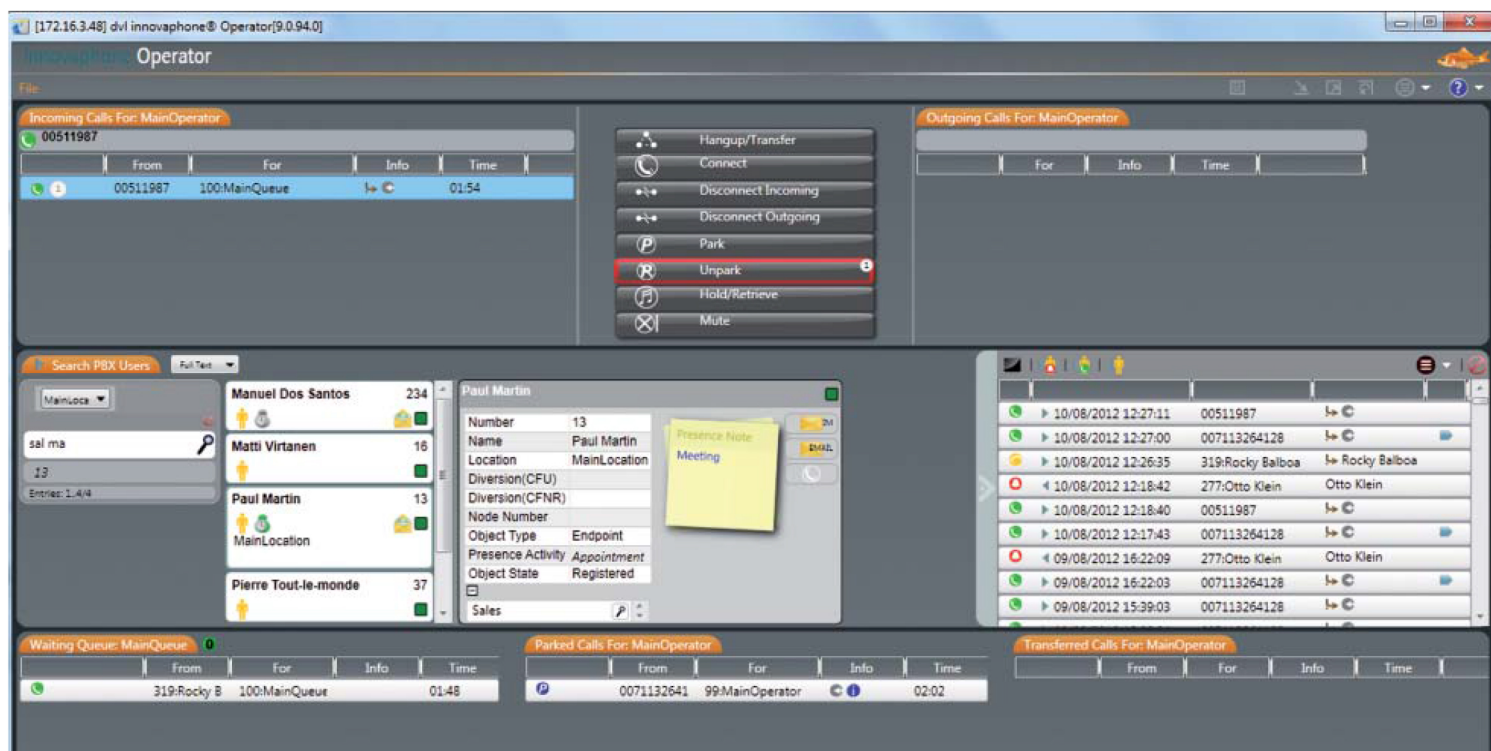
mouse, he automatically has the possibility of calling the other party directly or sending an email. If the contact is "active", a myPBX chat can be started directly. The user can use a drop-down menu with a total of six different Presence statuses (available, away, lunch, vacation, busy and "do not disturb") for his own Presence.

Presence information on the innovaphone IP phone

Coloured Presence icons for both calendar entries in Outlook as well as the Presence information used in myPBX are

innovaphone Operator:

The state-of-the-art switchboard



The innovaphone Operator is a modern computer-based telephone switchboard for the innovaphone PBX. It can access the innovaphone PBX's waiting queues and it can forward calls. These calls can be switched both with or without consultation across multiple sites (blind transfer).

Convenient call management

The intuitively designed innovaphone Operator user interface enables convenient call management and provides a quick overview of incoming, outgoing, parked and forwarded calls, as well as of calls that are currently in the waiting queue.

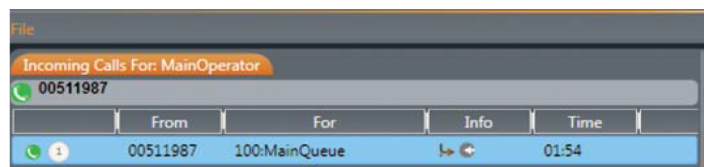
Incoming calls are routed via a waiting queue or directly to the operator. Calls that appear on the waiting queue are displayed graphically in the box „waiting queue“. The operator can drag & drop these calls to the “incoming calls” box. This has the advantage that the operator or switchboard staff knows about all of the calls in the waiting queue, enabling the subsequent call handling to take place selectively.

Alternatively, the configuration of the switchboard on the PBX can allow the top and thus oldest call in the waiting queue to be the call that is automatically assigned to the next free operator. The operator thus no longer needs to pick the next call from the waiting queue himself.

With the innovaphone Operator, particular emphasis has been placed on ease of use. Thus, an incoming call is automatically shown in the „incoming calls“ box where it can be picked up simply by pressing the ENTER key (or alternatively by double clicking the mouse). The operator is then connected to the caller and can deal with the caller's request.

Meaningful search results

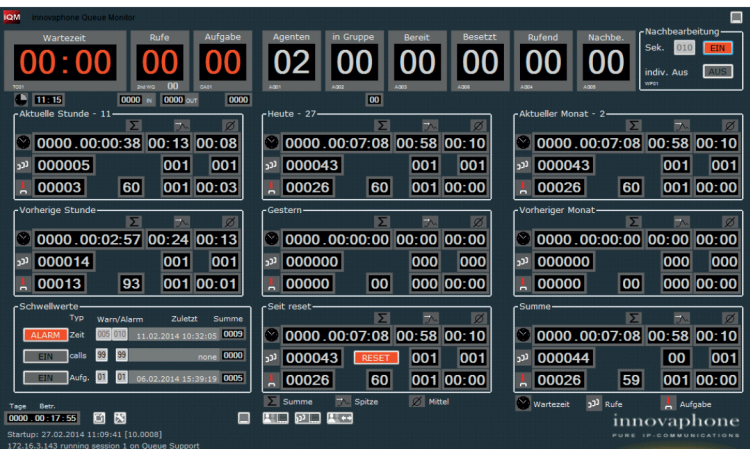
Once the call has been accepted, the switchboard's action focus automatically turns to the search field to enable a search for the target extension. The switchboard provides three different search options:



- :: All subscribers registered with the PBX can be searched for according to their short or long name, or via full text search.
- :: After its integration via LDAP, a central telephone register can also be accessed from the switchboard.
- :: All PBX subscribers are graphically displayed in the busy lamp field. This enables a quick and easy overview of their current status.

innovaphone Queue Monitor:

Call centre analysis for VoIP phone systems



A modern telephone system is essential for companies that use a call centre or help desk for consultations, service or sales. A detailed breakdown of the utilization of call centres is very helpful for optimizing the management and control of resources - people or machine power.

Switchboards, service hot lines or call centres with multiple lines can be operated with the innovaphone PBX VoIP phone system. Companies also need clarity about the respective load in a department: How many incoming calls are there? How many calls have been in the wait queue and for how long? How many callers hang up prematurely - even before they are put through?

The innovaphone Queue Monitor (iQM) collects this information from the innovaphone PBX VoIP telephone system in real time and displays it graphically and concisely. With this detailed overview of utilization in a department, an assessment can take place to show how well a telephone service system is working. Any bottlenecks or excess capacity can be demonstrated and evaluated. As a result, the innovaphone Queue Monitor helps to significantly increase customer satisfaction through better quality in the telephone service system.

The innovaphone Queue Monitor is installed on the user's client and accesses the innovaphone PBX VoIP phone system and its data over the network.

Functions, screens and representations of the innovaphone Queue Monitor

innovaphone Queue Monitor Agent

The innovaphone Queue Monitor consists of two elements. The main component of the innovaphone Queue Monitor is installed on the Supervisor desk (from Windows7). The second component, the Agent software, works as a client application

and can be installed on any call centre workstation. Thus the innovaphone Queue Monitor agent delivers all the relevant information to the call centre employees clearly and in real time: the number of available agents in a group, waiting time, the number of incoming calls and aborted calls. In addition, the agents can easily log in and out of groups via the innovaphone Queue Monitor while keeping an eye on the Presence status of their colleagues.

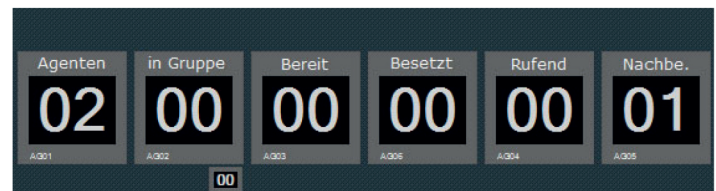


Second queue

Setting urgency levels for the queues is often an important requirement for smaller call centres. as this allows calls from various queues to be distributed flexibly. If there are no calls in the first queue, for example, but a lot in the second queue, the calls from the second queue can be assigned to the agent of the first queue.

innovaphone Queue Monitor Dashboard

The innovaphone Queue Monitor Dashboard enables the number of phone calls, waiting times and number of agents to be displayed in a simple graphical representation such as on a large monitor or projected on the wall. Exceeded limit values are represented with a red bar. Critical situations and bottlenecks can be seen by all agents at a glance and remedied immediately.



Counters, indicators and recording function

The innovaphone Queue Monitor has a variety of different indicators and counters. For example, these indicators can clearly show the number of pending or active agents, the status of the individual employee and the number of employees who are assigned to a phone service system. Also, the number of calls per queue, the waiting time of the oldest call, as well as aborted calls can be depicted in detail.

Different time counters allow the wait time, incoming calls and prematurely aborted calls to be displayed. Peak and average values are also represented. There is also the possibility of

innovaphone Software Phone:

More flexibility in the workplace



A traditional work place typically looks like this: A desk is equipped with a computer, a keyboard, a mouse and a desk phone. That is basically all an employee needs to get on with his work. But there are jobs

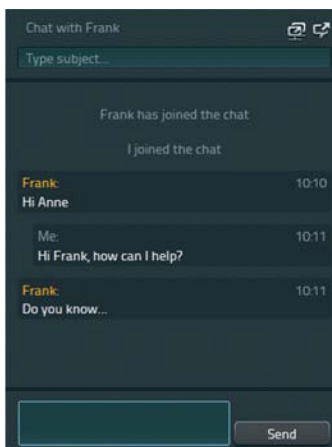
where the computer is so fundamental that a phone that works without a computer is no use at all. This can apply, for example, to some call centre jobs or to a computer based switchboard.

In such cases, the innovaphone Software Phone is the perfect choice and a low-cost alternative to a desk phone. It is installed on the employee's computer and controlled by the innovaphone Unified Communications client, myPBX, which serves as a telephone user interface. The only other thing that is needed is a USB headset. All telephone features are available and the employee also benefits from myPBX features such as Chat, Presence, Video telephony and Collaboration.

Another advantage: The innovaphone Software Phone can be used wherever there is IP connectivity. This makes it perfect for home offices or for those on the road - because those who take their notebook with them on their travels always automatically have their end device with them.

A wide range of features

Flexible communication - phone, chat or email



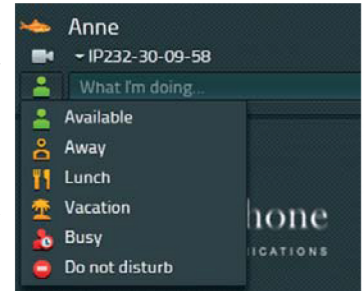
The Unified Communications client, myPBX, makes it possible for the Software Phone user to have access to any conventional telephone functions such as dial, accept call, hang-up, hold, park, three-party conference, toggle, connect, set call diversions or call pick-up.

As an alternative to the telephone call, it is also possible to start a chat session. This requires just one click in a Favourites list that can

be customised, and any number of participants can join. An email window can also be opened easily from myPBX to send messages.

Never busy again - Presence information also available in Outlook

With the Presence functionality, the employee has the possibility to get a quick overview of the availability of his colleagues and to set his own Presence. A drop-down menu with six different Presence statuses (present, absent, busy, lunch, vacation, and "do not disturb")



is available and a note can be added to these statuses (such as on vacation until Aug 31). The innovaphone Microsoft Office integration ensures that Presence information is integrated and shown in Outlook. Vice versa, calendar entries that are made by Software Phone users in Outlook are automatically shown in myPBX thus indicating colleagues' availability to the Software Phone user.

Find information quickly - simple search for contact details

Enter name, company name or phone numbers in a search field to search for any contact information. Detailed information about a particular search result (address, email address, position, etc.) can be displayed by clicking on the



information icon. In addition, the user has the possibility to send the contact information via email, to call the person directly, or to add them to a Favourites list.

Keeping an eye on everything - creating Favourite lists and individual profiles

Contacts that are used often can be shown and managed clearly in various Favourite lists. Adding new contacts takes place via an LDAP search. Specific contact persons can be bundled according to topics by creating individual profiles (e.g. suppliers). Presence information is displayed for all favourites. The Software Phone user sees immediately whether his potential contact person is available or not.

Available around the clock - Setting and managing call diversions

An employee who is not available can easily set a call

innovaphone Voice Recording:

Recording of calls made easy



Recording phone calls often has a negative connotation, especially in view of phone-hacking scandals. However, there are companies, institutions and authorities, for whom recording calls is necessary, even vital. Such critical applications are found in emergency police and fire department call centres, but also at banks and service providers whose telephone calls are contract-binding. For instance, recording threatening calls can be of utmost importance for investigations by police criminal investigation departments.

innovaphone Voice Recording is exactly the right tool for such cases. If necessary, any call can now be recorded with the innovaphone PBX, no matter whether it is inbound or outbound.

Another advantage: The innovaphone Multisite Recording can even record calls from different branches on a central recorder.

With innovaphone Voice Recording it does not matter which end devices are used for recording the calls. Phone calls can be recorded with all IP phones, analogue phones, DECT phones and even mobile phones.

innovaphone Voice Recording - Individual call recording:

Calls can be recorded quite freely and in various formats with the innovaphone Voice Recording tool. The user has the possibility to record complete calls or just selected parts of a phone call. The recording can be done automatically or manually from your own computer. This is possible even for a specified period of up to 5 minutes after a call has been terminated.

Recordings are in stereo mode: the left channel records the external party's speech and the right channel that of the internal party. The stereo audio files are stored as .wav or .mp3 formats and can also be AES encrypted, if required. A backup

copy is created automatically to ensure maximum security. Playback of non-encrypted call recordings is possible on any player (wave or MP3 format), encrypted recordings can be played back using the free innovaphone Player.

innovaphone Multiside Recording - A central recorder enables call recordings in small branches

With innovaphone Multisite Recording, companies with several small branches have the possibility to record calls using a central recorder.

The real-time recording takes place locally in the respective branch and the automatic data transfer to the central recorder is time-controlled. The timing or the duration of the data transmission to the central recorder can be customised.



innovaphone Player - Easy management of call recordings

With the innovaphone Player, the user has the option of marking calls as important directly on the phone, during or after a phone call, adding comments, and copying call recordings to global and private lists.

Recordings can be merged, archived and deleted. To provide a protocol of a complete chain of evidence, editing of recordings is also logged.

All call recordings are kept securely encrypted and can be managed easily. Recordings can be found quickly using a filter search thanks to the automatic addition of important information such as date, time, and call parties. In this, the user has the option of searching in directories according to month, days and by calling party or party being called.

innovaphone Voicemail:

More than a mere mailbox



It does not matter whether someone is away from his desk or engrossed in another conversation: with the innovaphone Voicemail he will never miss a call again!

The innovaphone Voicemail is a professional, integrated Voicemail solution available for every innovaphone PBX subscriber across the network. The innovaphone Voicemail uses the capabilities of the innovaphone PBX in the best possible way: This service is extremely easy and comfortable to operate using the feature keys on the telephone. No PIN is needed to access voicemail recordings on internal telephones, however, access from external telephones is PIN protected.

Maximum flexibility

DTMF enables messages that have been left to be accessed, deleted, repeated or saved from internal and external telephones. It is possible to return a call directly from the voicemail menu. Personal announcements such as a personalised message can be recorded and managed over the telephone directly at your desk. Moreover, the PIN number for external access can be changed in the voicemail menu.

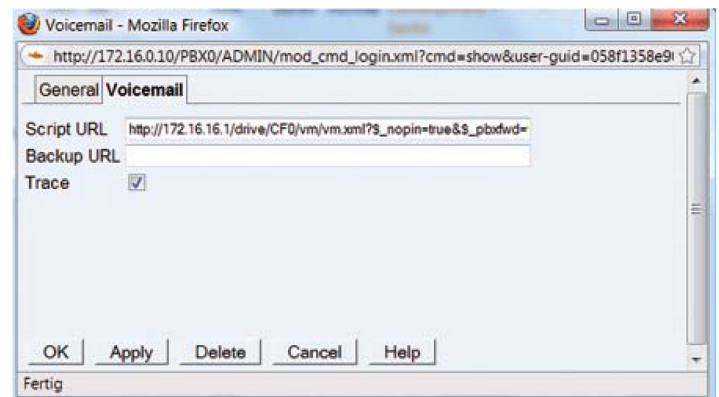
All innovaphone IP telephones use a lamp, text or icon to indicate a waiting message (Message Waiting Indication (MWI)). Telephones from third party manufacturers can also show that a message is waiting as long as the telephones are based on SIP or H.323. Alternatively, it is also possible to configure the voicemail to send the recipient an email informing him of a new message waiting. The email can be sent either with or without the message as an attached audio file (Wav file). In order for this function to be used, the administrator just needs to configure the XML file included in the delivery once (email.xml).

Tailored to fit: innovaphone Voicemail configuration

The core of the Voicemail is based on XML: The scripts for voicemail are delivered ready to use and, with a little experience in XML, they can easily be adjusted to fit. Thus emails can be sent with sender information, and data can be written or read in other systems, which can be useful for example for a customer number enquiry of an ERP system.

No server needed

The innovaphone Voicemail runs on the same hardware as the innovaphone PBX, a server is not necessary. A Compact Flash card can be used to store announcements and messages.



All devices used for operating the PBX are equipped with a Compact Flash slot. However, it is also possible to store messages on a computer or web server if necessary.

Licensing

Up to and including V9: The number of Voicemail licenses must be equal to the number of Port licenses on the innovaphone PBX - no matter how often the Voicemail is required.

Choose between the following two licensing models from V10:

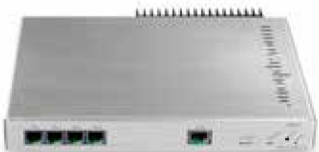


The on demand model (Voicemail User license): this licensing model requires one Voicemail User license per user.

With a V12 Voicemail User license it is not possible to downgrade to a V10 Voicemail license or older. It is also not possible to use the V12 Voicemail User license in PBX installations with version 10 or older.

The volume model (Voicemail license): this licensing model requires the number of Voicemail licenses to be equal to the number of Port licenses - no matter how often the Voicemail is needed.

myPBX derivates feature list

myPBX derivate	Web client	Windows Launcher	iOS App	Android App	Remarks
CTI client for remote phone	x	x	-	-	Manage remotely up to 6 devices
Call Control	x	x	x	x	Initiate/Accept calls; modify (e.g. hold, park, dtmf, transfer, conference)
Phonebook Access	x	x	x	x	iOS/Android App: provide additional access to personal phonebooks stored on the device itself
Call Lists	Shared	Shared	Local	Local	Shared: Call Lists are derived from the PBX (via reporting or Call lists service on PBX) Local: Are stored on the myPBX-app itself
Favorites	x	x	x	x	
Presence	x	x	x	x	
Chat	x	x	-	-	
Video	x	x	-	-	Web client: requires use of WebRTC + Webcam Windows Launcher: Requires use of software-phone or innovaphone IP Phone + Webcam
Collaboration	x	x	-	-	Web client: requires use of WebRTC - no sharing initiation, only reception
Office Integration	-	x	-	-	
External Application Integration	-	x	-	-	Trigger external application with a call.
Click to Dial	-	x	-	-	
Call Popup Notification	-	x	x	x	
Programmable function keys	-	-	x	x	
Audio embedded	x	x	x	x	Web client: requires softwarephone or use of WebRTC Windows Launcher: requires softwarephone
Platform	Any	Windows 7+	iOS 6.0+	Android 4.1+	Web client: for webRTC compliant browser is required (Chrome, FireFox, Opera)

	IP29-2	IP29-4	IP29	IP29 Bundle
				
Interfaces	2 x a/b FXS (RJ11, Modular Jack 6P2C)	4 x a/b FXS (RJ11, Modular Jack 6P2C)	8 x a/b FXS (RJ11, Modular Jack 6P2C)	16 x a/b FXS (RJ11, Modular Jack 6P2C)
Voice channels	2	4	8	16
Looping in	No	No	No	No
PBX support*	No	No	No	No
Compact flash and flash disk support	32 MB Flash	32 MB Flash	32 MB Flash	2 x 32 MB Flash
Linux Application Platform	No	No	No	No
Conference Unit	No	No	No	No
Ethernet switch	1 x Ethernet RJ45 (Modular Jack 8P8C) 10/100 Base-TX (Auto negotiation) "Power over Ethernet" according to IEEE 802.3af, Class 3 Energy Efficient according to IEEE 802.3az	1 x Ethernet RJ45 (Modular Jack 8P8C) 10/100 Base-TX (Auto negotiation) "Power over Ethernet" according to IEEE 802.3af, Class 3 Energy Efficient according to IEEE 802.3az	1 x Ethernet RJ45 (Modular Jack 8P8C) 10/100 Base-TX (Auto negotiation) "Power over Ethernet" according to IEEE 802.3af, Class 3 Energy Efficient according to IEEE 802.3az	2 x Ethernet RJ45 (Modular Jack 8P8C) 10/100 Base-TX (Auto negotiation) "Power over Ethernet" according to IEEE 802.3af, Class 3 Energy Efficient according to IEEE 802.3az
External power supply	"Power over Ethernet" according to IEEE 802.3af, Class 3	"Power over Ethernet" according to IEEE 802.3af, Class 3	"Power over Ethernet" according to IEEE 802.3af, Class 3	"Power over Ethernet" according to IEEE 802.3af, Class 3
Codecs	G.711 A-law /G.711 µ-law G.722 G.723.1 (5.3) G.729A und Opus NB incl. VAD (voice activity detection), CNG (comfort noise generation) dynamic jitter buffering G.168 echo canceller modem support	G.711 A-law /G.711 µ-law G.722 G.723.1 (5.3) G.729A und Opus NB incl. VAD (voice activity detection), CNG (comfort noise generation) dynamic jitter buffering G.168 echo canceller modem support	G.711 A-law /G.711 µ-law G.722 G.723.1 (5.3) G.729A und Opus NB incl. VAD (voice activity detection), CNG (comfort noise generation) dynamic jitter buffering G.168 echo canceller modem support	G.711 A-law /G.711 µ-law G.722 G.723.1 (5.3) G.729A und Opus NB incl. VAD (voice activity detection), CNG (comfort noise generation) dynamic jitter buffering G.168 echo canceller modem support
Protocols	H.323 & SIP multiprotocol T.38, G.711 (fax)	H.323 & SIP multiprotocol T.38, G.711 (fax)	H.323 & SIP multiprotocol T.38, G.711 (fax)	H.323 & SIP multiprotocol T.38, G.711 (fax)
Order number	01-00029-003	01-00029-004	01-00029-001	88-00010-056

* The innovaphone PBX has 100% the same functionality and features on all supported devices. The configuration interface on all boxes is http.

	IP222 - black	IP222 - white	IP232 - black	IP232 - white
				
Display	High Colour display (16 Bit), 320 x 240 Pixel Back light Customized background picture possible	High Colour display (16 Bit), 320 x 240 Pixel Back light Customized background picture possible	High Colour display (16 Bit), 480 x 272 Pixel Capacitive touchscreen Back light Customized background picture possible	High Colour display (16 Bit), 480 x 272 Pixel Capacitive touchscreen Back light Customized background picture possible
Keyboard	Numeric 4 direction navigation keys 2 x 6 function keys 5 special control keys	Numeric 4 direction navigation keys 2 x 6 function keys 5 special control keys	Numeric 4 direction navigation keys 5 special control keys	Numeric 4 direction navigation keys 5 special control keys
Protocols	H.323 & SIP Multiprotocol Voice data encryption Up to 6 concurrent registrations	H.323 & SIP Multiprotocol Voice data encryption Up to 6 concurrent registrations	H.323 & SIP Multiprotocol Voice data encryption Up to 6 concurrent registrations	H.323 & SIP Multiprotocol Voice data encryption Up to 6 concurrent registrations
Codecs	G.711 A-law / μ -law (64 kbps) G.722 G.729A (16 kbps) VAD, CNG Dynamic Jitter Buffering Echo Compensation: G.168	G.711 A-law / μ -law (64 kbps) G.722 G.729A (16 kbps) VAD, CNG Dynamic Jitter Buffering Echo Compensation: G.168	G.711 A-law / μ -law (64 kbps) G.722 G.729A (16 kbps) VAD, CNG Dynamic Jitter Buffering Echo Compensation: G.168	G.711 A-law / μ -law (64 kbps) G.722 G.729A (16 kbps) VAD, CNG Dynamic Jitter Buffering Echo Compensation: G.168
Handsfree & open listening	Only handsfree (no open listening)	Only handsfree (no open listening)	Only handsfree (no open listening)	Only handsfree (no open listening)
Headset support	Yes via USB	Yes via USB	Yes via USB	Yes via USB
Interfaces	2 x Gigabit Ethernet, RJ45 (Modular Jack 8P8C) "Power over Ethernet" according to IEEE 802.3af, Class 2 Energy Efficient according to IEEE802.3az 3 x USB	2 x Gigabit Ethernet, RJ45 (Modular Jack 8P8C) "Power over Ethernet" according to IEEE 802.3af, Class 2 Energy Efficient according to IEEE802.3az 3 x USB	2 x Gigabit Ethernet, RJ45 (Modular Jack 8P8C) "Power over Ethernet" according to IEEE 802.3af, Class 2 Energy Efficient according to IEEE802.3az 3 x USB	2 x Gigabit Ethernet, RJ45 (Modular Jack 8P8C) "Power over Ethernet" according to IEEE 802.3af, Class 2 Energy Efficient according to IEEE802.3az 3 x USB
Power over Ethernet	Class 2 (without extension module)	Class 2 (without extension module)	Class 2 (without extension module)	Class 2 (without extension module)
External power supply	Primary: 110-240 V, 50 Hz, 45 mA Secondary: 12 V DC, 800 mA	Primary: 110-240 V, 50 Hz, 45 mA Secondary: 12 V DC, 800 mA	Primary: 110-240 V, 50 Hz, 45 mA Secondary: 12 V DC, 800 mA	Primary: 110-240 V, 50 Hz, 45 mA Secondary: 12 V DC, 800 mA
Extension module	Yes via USB	Yes via USB	Yes via USB	Yes via USB
Order number	01-00222-001	01-00222-002	01-00232-001	01-00232-002

	IP6010	IP3011	IP811	IP411
				
Interfaces	4 x PRI 1 x BRI 2 x Fast Ethernet	1 x PRI 2 x Gigabit Ethernet	5 x BRI 2 x Gigabit Ethernet	2 x BRI 2 x FXS 2 x Gigabit Ethernet
Voice channels	60	30	10	6
Loop-in operation	Yes	No	Yes	No
PBX support*	Recommended for "all in one box" - PBX and UC installations up to 500 users	Recommended for "all in one box" - PBX and UC installations up to 500 users	Recommended for "all in one box" - PBX and UC installations up to 200 users	Recommended for "all in one box" - PBX and UC installations up to 50 users
Compact Flash and Flash Disk support	Compact Flash Card slot 32 Mbyte Flash	1 Gbyte Flash Disk 32 Mbyte Flash	1 Gbyte Flash Disk 32 Mbyte Flash	128 Mbyte Flash Disk 32 Mbyte Flash
SSD slot	No	Yes, inside	Yes, inside	Yes, inside
Linux Application Platform	Yes	Yes	Yes	Yes
Conference Unit	60	30	10	0
Ethernet	2 x Fast Ethernet RJ45 (Modular Jack 8P8C) 10/100 Base-TX (Auto Negotiation) "Power over Ethernet" according to IEEE 802.3af, Class 3	2 x Gigabit-Ethernet: 1000-Base-T (Auto Negotiation), RJ45 (Modular Jack 8P8C) "Power over Ethernet" according to IEEE 802.3af, Class 3 Energy Efficient according to IEEE 802.3az	2 x Gigabit-Ethernet: 1000-Base-T (Auto Negotiation), RJ45 (Modular Jack 8P8C) "Power over Ethernet" according to IEEE 802.3af, Class 3 Energy Efficient according to IEEE 802.3az	2 x Gigabit-Ethernet: 1000-Base-T (Auto Negotiation), RJ45 (Modular Jack 8P8C) "Power over Ethernet" according to IEEE 802.3af, Class 3 Energy Efficient according to IEEE 802.3az
Codecs	G.711 A-law / μ -law G.729 AB G.723.1 VAD, CNG Dynamic Jitter Buffering Echo Compensation: G.168 Data modem support	G.711 A-law / μ -law G.723.1 G.729AB Opus VAD, CNG Dynamic Jitter Buffering Echo Compensation: G.168 Data modem support	G.711 A-law / μ -law G.723.1 G.729AB Opus VAD, CNG Dynamic Jitter Buffering Echo Compensation: G.168 Data modem support	G.711 A-law / μ -law G.723.1 G.729AB Opus VAD, CNG Dynamic Jitter Buffering Echo Compensation: G.168 Data modem support
Protocols	H.323 & SIP multiprotocol T.38 (fax)	H.323 & SIP multiprotocol T.38, G.711 (fax)	H.323 & SIP multiprotocol T.38, G.711 (fax)	H.323 & SIP multiprotocol T.38, G.711 (fax)
Order number	01-06010-002	01-03011-001	01-00811-001	01-00411-001

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