

THE WORLD OF  
TELECOMMUNICATION

2007/2008

# AUERSWALD



ENGLISH  
VERSION



Simply Clever PBX Systems



**Gerhard Auerswald**  
General Manager

*Dear Clients*

*Thank you for your interest in the Auerswald product range. Our new catalogue presents, once again, well-established and proven products and also many interesting new developments, tailored to your specific requirements. And you can be sure to find only high-end products offering excellent value for money.*

*What makes Auerswald products so special? I believe we do – because at Auerswald we are passionate about development. Our PBX systems are developed, designed and produced here on site. We do more than simply meeting current requirements – we want to offer you, our clients, a wide range of useful functions and create each product to the highest possible quality.*

*With this goal in mind, we have worked hard to find a way of producing our COMfortel 1500 and COMfortel 2500 system telephones in Germany at a similar cost as in the Far East. This seemed an almost impossible challenge, as you can probably imagine. But with some clever design details and customised production equipment, we have been able to minimise production time, while also achieving superior product quality and saving jobs. Surely a much more far-sighted approach than following the conclusions of a preliminary cost review and moving production abroad – as is the current trend.*

*We shall continue to use all our expertise and ideas, our passion and our knowledge to design and create products for long-term client satisfaction – products for you.*

*Best regards from Cremlingen, Germany*

  
Gerhard Auerswald



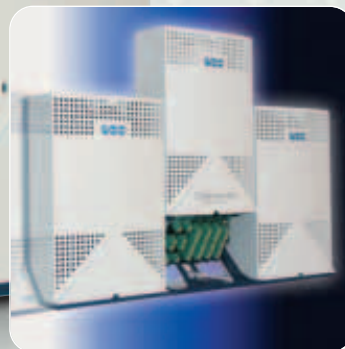
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# COMmander®



## COMmander Business:

The basic version comes with a two-part housing with enough slots for nine modules. If required, the optional extension has room for six additional modules.



Or integrate COMmander Business with a local area network (LAN) and use the system's web interface. You will no longer need to install specific applications on any PC, as the web interface includes a configuration interface and administration tools.

These are automatically updated when you update the system software for the telephone system. Administration of COMmander Business is platform-independent. With the use of a web browser, the configuration or remote servicing of COMmander Business is possible from anywhere in the world.

## Master of communication

## COMmander® Business

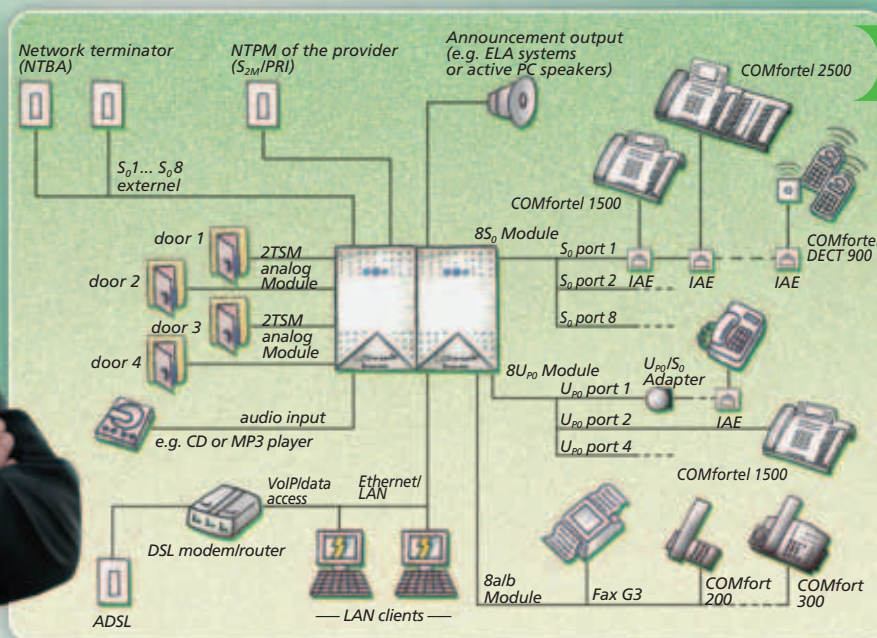
It's an extremely flexible system, which you can upgrade with analog, digital and door ports, to a total of 120 extension ports. For connections with the public telephone network, you can set up both ISDN basic rate interfaces and a PRI primary multiplex interface. The standard COMmander Business model comes with a two-part housing and has enough slots for nine cards. You can also connect COMmander Business Xtension on the left-hand side, and plug in up to six additional card modules. And how is this for flexibility: COMmander Business lets you use either system telephones or ISDN telephones, in U<sub>0</sub> 2-wire and S<sub>0</sub> 4-wire versions, thus fitting in with almost any existing infrastructure.

### Online Upgrade Center COMmander® Business / Business 19"

COMmander Business can even help you save money: its upgrade options mean that you only pay for the functions you are using.

An authorised specialist dealer can easily activate specific functions or additional extension ports via the Online Upgrade Center. Any authorised dealer can also activate specific functions for a limited time only, so you can test them fully before deciding to upgrade.





## COMmander® Business 19"

To accommodate the latest IT developments, Auerswald also offers a 19" rack version of COMmander Business with stainless steel front, which allows integration with a structured cabling system (SCS). Both the standard model and the classic wall-mounted version have nine slots. If required, the optional COMmander Business 19" Xtension has enough room for six additional card modules.

- Up to 120 extension ports
  - Internet telephony via the integrated LAN interface, up to 2 VoIP calls simultaneously <sup>25</sup>
  - Group functions with smart ringing options (All, Linear or Incremental)
  - Waiting Field (manual/automatic) with multiple central switchboards, for up to 38 calls, can be operated with keys on COMfortel 1500/2500 <sup>27</sup>
  - Hotel Function (e.g. check-in/check-out and printout of bills without a computer) <sup>26</sup>
  - Announcement before Answering when Busy or No Answer <sup>27</sup>
  - Boss/Secretary function, flexible assignment of extensions
  - CTI – computer-based telephony using LAN-TAPI <sup>24</sup>
- ➔ To view the whole range of functions and to compare the different systems, please refer to the back pages.

### At home in the IT world

**COMmander Business 19":** The 19" rack version perfectly accommodates the latest IT environment. This illustration shows the version incl. a fully equipped COMmander Business 19" Xtension.



### COMmander® Business / COMmander® Business 19"

● **Basic configuration** Trunk line ports: not available, Extension ports: not available, PC ports: USB, Ethernet, V.24, Miscellaneous: processor module, AC adapter for maximum configuration, 2-part housing unit

● **Maximum configuration** Trunk line ports: 16 S<sub>0</sub> ports or 1 PRI port with 4 S<sub>0</sub> ports, Extension ports: 56 S<sub>0</sub> ports, 72 U<sub>po</sub> ports, 64 analog ports, Door ports: 4 door openers, 16 bell ports, Miscellaneous: 3-part housing unit

● **Technical data** Power supply: earthed safety plug, 230 V +/-10 %, 50 Hz, max. 230 VA, Trunk line ports: S<sub>0</sub> port(s) and S<sub>3M</sub> port, Euro ISDN (DSS-1), PTMP/PTP connection, ISDN extension ports: S<sub>0</sub> and U<sub>po</sub> port(s), Euro ISDN (DSS-1), PTMP connection, Analog extension ports: CLIP-enabled, pulse/tone dialling, symmetrical, 2 x 50 Ω (approx. 790 m with Ø 0.6 mm), Printer port: RS-232 C (V.24), 9600 baud, 8 n 1, PC/data port: USB, Ethernet port (LAN): 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), Housing: plastic, 6 (9") parts with 2 (3") wall-mountable housings, 2 (3") module carriers, and 2 (3") covers, Dimensions: 445 (667.5") mm x 357 mm x 142 mm, Weight: approx. 4.6 kg (6.5\*kg), without card modules

● **COMmander® Business 19"** like COMmander Business, but

Housing: closed 19" rack, 7 HU, stainless steel front, Dimensions: 483 mm x 265 mm x 495 mm, Installation depth: 540 mm from front plate (incl. cable installation in the back), Weight: approx. 14 kg (15.5\*kg), without card modules

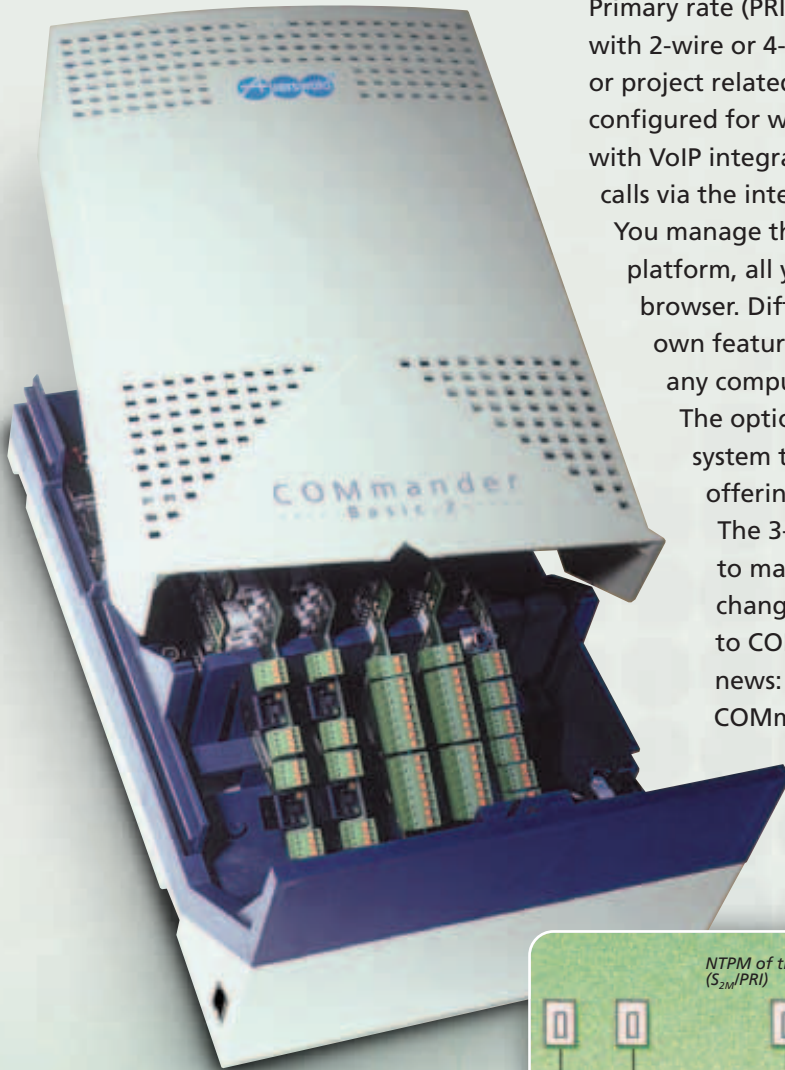
\* The values in brackets refer to COMmander Business with add-on housing.



You can find a complete list of card modules for COMmander Business and sample configurations on pages 6 and 7.

# COMmander®

## COMmander® Basic.2

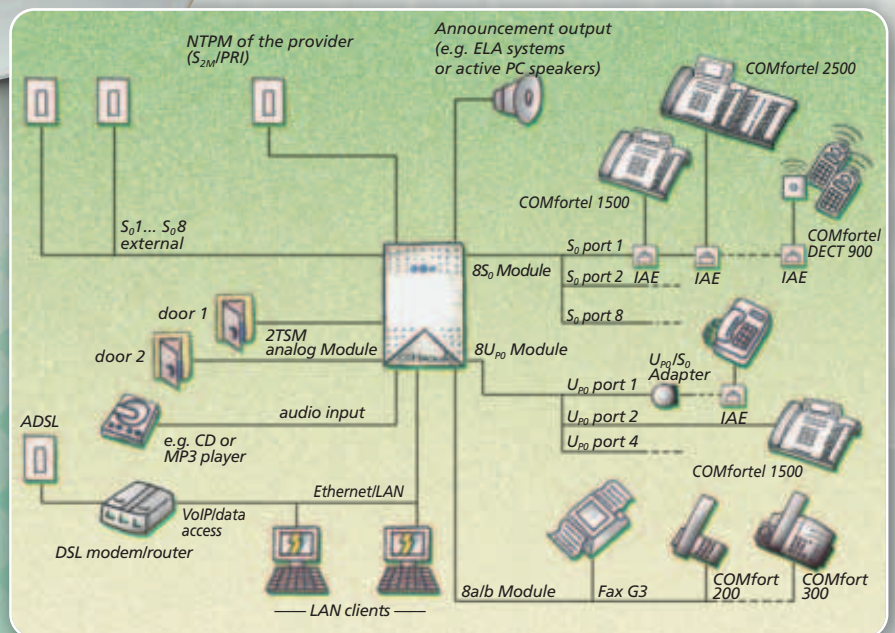


If you're looking for a professional PBX system that provides up to 48 extension ports and internet telephony (VoIP), we've got the solution you need: COMmander Basic.2. It has all the features you'd expect from a state-of-the-art system.

Primary rate (PRI) trunk line connections or system telephones with 2-wire or 4-wire connections, and functions such as LAN-TAPI or project related accounting of calls – this PBX system can be configured for whatever hardware or functions you wish. And with VoIP integration even for the standard model, you can make calls via the internet without even having to switch on your PC. You manage the system via its web interface. Whatever the platform, all you need is an operating system with a web browser. Different access levels allow users to configure their own features – not just from their local computer, but from any computer with internet access, using a web browser. The option of integrating future technologies or DECT system telephones protects your investment, thus offering excellent value for money in the long term. The 3-part wall-mountable housing has been designed to make installation as simple as possible. And if you're changing from a first-generation COMmander Basic to COMmander Basic.2, here's some more good news: you can use all existing card modules in COMmander Basic.2 (4S<sub>0</sub> Module min. Rev. 2).



The mounting of the system is pretty easy: chassis on the wall, put on the rack, equip with modules, cover on, finished.



Designed for growth,  
built for the future





COMmander Basic.2 19" with fully equipped front patch panel.

## COMmander® Basic.2 19"

Are you looking for a professional ITC system that will fit perfectly into your IT environment? COMmander Basic.2 19" fits the bill! It's almost the same as COMmander Basic.2, but designed for structured cabling systems (SCS). All major ports are located on the stainless steel front of COMmander Basic.2 19". It has RJ-45 jacks for trunk line, extension and door ports, and you can add further jacks if you need them. The patch panels enable fast installation, with no tools required.



## A well-structured ITC system

### These options for COMmander® Basic.2 / Basic.2 19" can be activated in the Upgrade Center:

- Additional internal numbers (up to 112), 48 included
- Soft LCR (extensions in increments of 8, up to 112), 16 included<sup>1</sup>
- Call-Through connections (all lines), 4 simultaneous connections in scope of supply
- Call records (in increments of 3000, up to 9000), 3000 in scope of supply
- Project-specific billing of calls
- LAN-TAPI (extensions in increments of 8, up to 112), package includes 4
- X.31 on internal S<sub>0</sub> port (X.25 in D channel)
- Hotel Function (in-room telephones in increments of 8)
- Automatic Reception (enhanced Announcement before Answering)<sup>1</sup>

You can find an illustration of the Upgrade Center on page 2.



You can find a complete list of card modules for COMmander Basic.2 and sample configurations on pages 6 and 7.

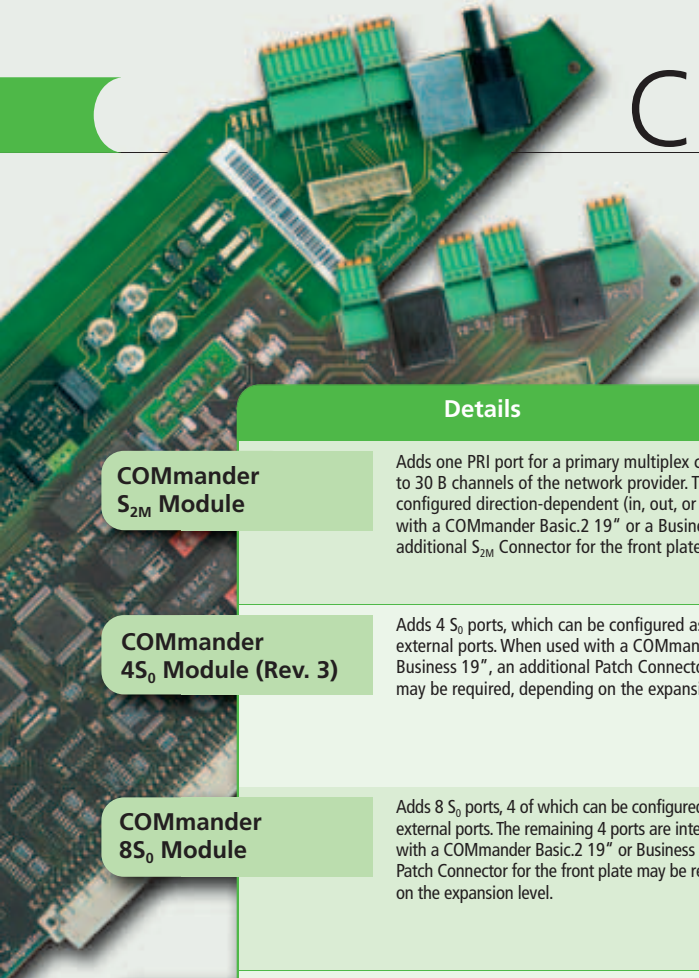
<sup>1</sup> will become available later as an update

- Up to 48 extension ports
- Group functions with smart ringing options (All, Linear or Incremental)
- Internet telephony, 2 simultaneous VoIP calls
- Full VoIP system integration (e.g. automatic routing, call distribution, trunk line authorisations, barred and permitted numbers) [25](#)
- Waiting Field for 34 calls, can be key-operated with COMfortel 1500/2500 [27](#)
- Personal trunk line with personal password, with access from any extension
- Music on Hold with additional announcement, music (approx. 6 min.) and message (approx. 1 min.) can be uploaded from PC in WAV format
- Hotel Function (check-in/check-out, printing of bills without a PC) [26](#)
- Boss/Secretary function, flexible assignment of extensions
- CTI – computer-based telephony via LAN-TAPI [24](#)

### COMmander® Basic.2 / COMmander® Basic.2 19"

- **Basic configuration** *Trunk line ports:* not available, *Extension ports:* not available, *PC ports:* USB, Ethernet, V.24, *Miscellaneous:* processor module, AC adapter for maximum configuration
- **Maximum configuration** *Trunk line ports:* 8 S<sub>0</sub> ports or 1 PRI port with 2 S<sub>0</sub> ports, *Extension ports:* 24 S<sub>0</sub> ports, 32 U<sub>0</sub> ports, 32 analog ports, *Door ports:* 2 door ports (2 door openers, 8 bell ports)
- **Technical data** *Power supply:* earthed safety plug, 230 V +/-10 %, 50 Hz, max. 70 VA, *Exchange line ports:* S<sub>0</sub> port(s) and S<sub>2M</sub> port, Euro ISDN (DSS-1), PTMP/PTP connection, *ISDN extension ports:* S<sub>0</sub> and U<sub>0</sub> port(s), Euro ISDN (DSS-1), PTMP connection, *Analog extension ports:* CLIP-enabled, pulse/tone dialling, symmetrical, 2 x 50 Ω (approx. 790 m with Ø 0.6 mm), *Printer port:* RS-232 C (V.24), 9600 baud, 8 n 1, *PC/data port:* USB (full speed, V1.1 compatible with V2.0), *Ethernet port (LAN):* 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), *Housing:* plastic, three parts with wall-mountable chassis, module carrier and cover, *Dimensions:* 220 mm x 354 mm x 142 mm, *Weight:* approx. 2.4 kg without card modules
- **COMmander® Basic.2 19"** like COMmander Basic.2, but *Housing:* closed 19" rack, 3 HU with stainless steel front, *Dimensions:* 483 mm x 132.5 mm x 410 mm, *Installation depth:* 430 mm from front plate (incl. cable installation at the back), *Weight:* approx. 6.0 kg without card modules

# COMmander®



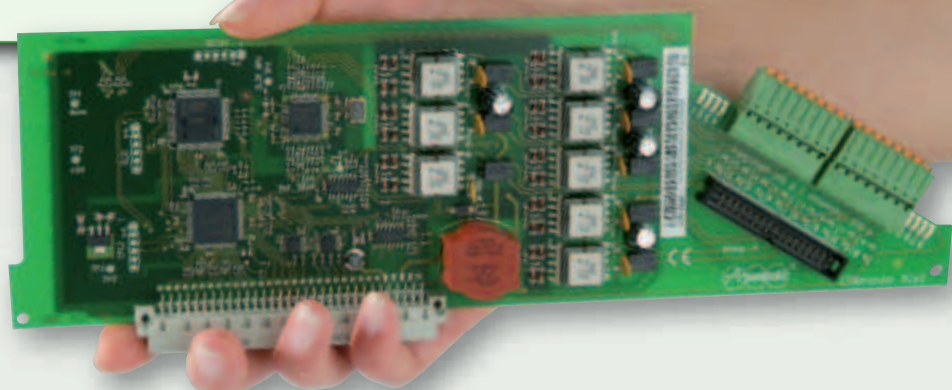
Max. number of applicable modules in

COMmander Basic.2

COMmander Business

Details	Technical data	COMmander Basic.2	COMmander Business
<b>COMmander S<sub>2M</sub> Module</b> Adds one PRI port for a primary multiplex connection with up to 30 B channels of the network provider. The channels can be configured direction-dependent (in, out, or in/out). When used with a COMmander Basic.2 19" or a Business 19", an additional S <sub>2M</sub> Connector for the front plate is required.	<b>Operating voltage:</b> from the COMmander base unit, <b>Installation:</b> slot inside the COMmander unit, <b>Outside line:</b> 1 S <sub>2M</sub> port (PRI), Euro ISDN (DSS-1), point-to-point (PTP), <b>Dimensions:</b> 293 mm x 70 mm x 16 mm, <b>Weight:</b> 105 g.	1	1
<b>COMmander 4S<sub>0</sub> Module (Rev. 3)</b> Adds 4 S <sub>0</sub> ports, which can be configured as internal or external ports. When used with a COMmander Basic.2 19" or Business 19", an additional Patch Connector for the front plate may be required, depending on the expansion level.	<b>Operating voltage:</b> from the COMmander base unit, <b>Installation:</b> slot inside the COMmander unit, <b>Outside lines:</b> up to 4 S <sub>0</sub> ports, Euro ISDN (DSS-1), point-to-multipoint (PTMP) or point-to-point port (PTP), <b>Internal S<sub>0</sub> ports:</b> up to 4 S <sub>0</sub> ports Euro ISDN (DSS-1), PTMP, <b>Dimensions:</b> 293 mm x 97 mm x 16 mm, <b>Weight:</b> 172 g.	5	12
<b>COMmander 8S<sub>0</sub> Module</b> Adds 8 S <sub>0</sub> ports, 4 of which can be configured as internal or external ports. The remaining 4 ports are internal ports. When used with a COMmander Basic.2 19" or Business 19", an additional Patch Connector for the front plate may be required, depending on the expansion level.	<b>Operating voltage:</b> from the COMmander base unit, <b>Installation:</b> slot inside the COMmander unit, <b>Outside lines:</b> up to 4 S <sub>0</sub> ports, Euro ISDN (DSS-1), point-to-multipoint (PTMP) or point-to-point port (PTP), <b>Internal S<sub>0</sub> ports:</b> up to 8 S <sub>0</sub> ports Euro ISDN (DSS-1), PTMP, <b>Dimensions:</b> 293 mm x 97 mm x 16 mm, <b>Weight:</b> 180 g.	3	9
<b>COMmander 8U<sub>P0</sub> Module</b> Adds 8 U <sub>P0</sub> ports, for 2-wire integration of system telephones and ISDN terminal devices. For 2-wire to 4-wire conversion (e.g. for older COMfort system telephones), the COMmander U <sub>P0</sub> /S <sub>0</sub> Adapter is required. When used with a COMmander Basic.2 19" or Business 19", an additional Patch Connector for the front plate may be required, depending on the expansion level.	<b>Operating voltage:</b> from the COMmander base unit, <b>Installation:</b> slot inside the COMmander unit, <b>U<sub>P0</sub> ports:</b> for up to 8 U <sub>P0</sub> ports, Euro ISDN (DSS-1), point-to-multipoint port (PTMP), <b>Range:</b> up to 1000 m, <b>Dimensions:</b> 293 mm x 97 mm x 16 mm, <b>Weight:</b> 123 g.	4	9
<b>COMmander 8a/b Module</b> Adds 8 analog extensions with number and name display (CLIP/CNIP) and SMS messaging support. When used with a COMmander Basic.2 19" or Business 19", an additional Patch Connector for the front plate may be required, depending on the upgrade level.	<b>Operating voltage:</b> from the COMmander base unit, <b>Installation:</b> slot inside the COMmander unit, <b>Extension ports:</b> for 8 analog terminal devices, pulse/tone dialling, CLIP-enabled, <b>Range:</b> 2 x 50 Ω, 790 m with 0.6 mm Ø wire, <b>Dimensions:</b> 293 mm x 97 mm x 16 mm, <b>Weight:</b> 133 g.	4	8
<b>COMmander 2TSM analog Module</b> This audio intercom door entry system module has ports for 2 door terminals (2 door openers and 4 bell ports), 6 relays (2 will be used for each door terminal), 1 port for a second doorbell, 1 external audio input, 1 external audio output. When used with a COMmander Basic.2 19" or Business 19", an additional 2TSM Connector for the front plate is required.	<b>Operating voltage:</b> from the COMmander base unit, <b>Installation:</b> slot inside the COMmander unit, <b>Door ports:</b> compliant with FTZ 123 D 12-0, <b>Max. load door opener/relay:</b> 30 V AC, 1 A, <b>Doorbell/Pushbutton Input:</b> for 4 doorbell buttons, 5 to 15 V AC or DC positive TGND / for 4 potential-free door catches, <b>Dimensions:</b> 293 mm x 75 mm x 16 mm, <b>Weight:</b> 120 g.	1	4
<b>COMmander U<sub>P0</sub>/S<sub>0</sub> Adapter</b> Additional adapter for the COMmander 8U <sub>P0</sub> Module, for the conversion from the 2-wire U <sub>P0</sub> port to the 4-wire S <sub>0</sub> port, e.g. for the connection of older COMfort system telephones.	<b>Operating voltage:</b> from the COMmander base unit, <b>U<sub>P0</sub> port:</b> 1 U <sub>P0</sub> port for connection with the 8U <sub>P0</sub> Module, <b>Internal S<sub>0</sub> ports:</b> 1 S <sub>0</sub> port, Euro ISDN (DSS-1), point-to-multipoint port (PTMP), <b>Range:</b> up to 1000 m, <b>Case:</b> plastic, 2 parts, <b>Dimensions:</b> Ø 95 mm x 33 mm, <b>Weight:</b> 100 g.	<b>Max. 8 per 8U<sub>P0</sub> Module</b>	
<b>COMmander Autoswitch</b> Additional card for the COMmander 4S <sub>0</sub> Module (Rev. 2), to allow emergency operation of 1 ISDN telephone during a power failure. Every COMmander 4S <sub>0</sub> Module (Rev. 2) can be fitted with 2 COMmander Autoswitch cards. For COMmander 8S <sub>0</sub> Module or the new 4S <sub>0</sub> Module (Rev. 3) the external ISDN-Autoswitch is recommended.	<b>Installation:</b> slot on the COMmander 4S <sub>0</sub> Module (Rev. 2), <b>Dimensions:</b> 40 mm x 36 mm x 14 mm, <b>Weight:</b> 14 g.	<b>Max. 2 per 4S<sub>0</sub> Module</b>	

This is an overview of all module configuration options for the various COMmander models.





Configuration examples COMmander® Basic.2		Examples for configuration variants		U <sub>p0</sub> ports	Analog ports	Suggested number of subscribers		Other in-/output
		S <sub>0</sub> ports ext. (trunk)	S <sub>0</sub> ports internal					
Minimum expansion analog-digital	1 x 4S <sub>0</sub> Module 1 x 8a/b Module	1-4	0-3	-	8	8-14		-
Balanced expansion, analog-digital	1 x 8S <sub>0</sub> Module 2 x 8a/b Modules 1 x 8U <sub>p0</sub> Module 1 x 2TSM analog Module	1-4	4-7	8	16	32-38		2 door ports, 4 door bell inputs 6 switching relays, 1 audio input, 1 audio output
Complete expansion based on analog ports	1 x 8S <sub>0</sub> Module 4 x 8a/b Modules	1-4	4-7	-	32	40-46		-
Complete expansion based on analog ports + PRI trunk line	1 x S <sub>2M</sub> Module 4 x 8a/b Modules	PRI	-	-	32	32		-
Complete expansion based on S <sub>0</sub> /U <sub>p0</sub> ports	2 x 8S <sub>0</sub> Modules 2 x 8U <sub>p0</sub> Modules 1 x 2TSM analog Module	1-8	8-15	16	-	32-46		2 door ports, 4 door bell inputs 6 switching relays, 1 audio input, 1 audio output
Complete expansion based on S <sub>0</sub> ports + PRI trunk line	1 x S <sub>2M</sub> Module 3 x 8S <sub>0</sub> Modules 1 x 2TSM analog Module	PRI 0-2	22-24	-	-	46-48		2 door ports, 4 door bell inputs 6 switching relays, 1 audio input, 1 audio output
Complete expansion based on U <sub>p0</sub> ports	1 x 8S <sub>0</sub> Module 4 x 8U <sub>p0</sub> Modules	1-4	4-7	32	-	38-46		-

Configuration examples COMmander® Business		Examples for configuration variants		U <sub>p0</sub> ports	Analog ports	Suggested number of subscribers		Other in-/output
		S <sub>0</sub> ports ext. (trunk)	S <sub>0</sub> ports internal					
Partly expansion, analog-digital balanced	3 x 8S <sub>0</sub> Modules 3 x 8a/b Modules 3 x 8U <sub>p0</sub> Modules	1-12	12-23	24	24	2	72-94	-
Partly expansion, analog-digital + PRI trunk line	1 x S <sub>2M</sub> Module 3 x 8S <sub>0</sub> Modules 2 x 8a/b Modules 3 x 8U <sub>p0</sub> Modules	PRI 0-4	20-24	24	16	2	80-88	-
Complete expansion based on analog ports	6 x 8S <sub>0</sub> Modules 8 x 8a/b Modules 1 x 8U <sub>p0</sub> Module	1-16	32-47	8	64	3	112	-
Complete expansion based on analog ports + PRI trunk line	1 x S <sub>2M</sub> Module 5 x 8S <sub>0</sub> Modules 8 x 8a/b Modules 1 x 2TSM analog Module	PRI 0-4	36-40	-	64	3	112	2 door ports, 4 door bell inputs 6 switching relays, 1 audio input, 1 audio output
Complete expansion based on S <sub>0</sub> ports	9 x 8S <sub>0</sub> Modules 5 x 8a/b Modules 1 x 2TSM analog Module	1-16	max. 56	-	40	3	112	2 door ports, 4 door bell inputs 6 switching relays, 1 audio input, 1 audio output
Complete expansion based on S <sub>0</sub> ports + PRI trunk line	1 x S <sub>2M</sub> Module 7 x 8S <sub>0</sub> Modules 1 x 4S <sub>0</sub> Module 4 x 8a/b Modules 1 x 2TSM analog Module	PRI 0-4	max. 56	-	32	3	112	2 door ports, 4 door bell inputs 6 switching relays, 1 audio input, 1 audio output
Complete expansion based on U <sub>p0</sub> ports	1 x 8S <sub>0</sub> Module 3 x 8a/b Modules 9 x 8U <sub>p0</sub> Modules 1 x 2TSM analog Module	1-4	4-7	72	24	3	96-110	2 door ports, 4 door bell inputs 6 switching relays, 1 audio input, 1 audio output
Complete expansion based on U <sub>p0</sub> ports + PRI trunk line	1 x S <sub>2M</sub> Module 1 x 8a/b Module 9 x 8U <sub>p0</sub> Modules 1 x 2TSM analog Module	PRI	-	72	8	3	80	2 door ports, 4 door bell inputs 6 switching relays, 1 audio input, 1 audio output

# COMpact

## COMpact 5010 VoIP

The expression all-rounder would have been invented to describe the COMpact 5010 VoIP if it didn't exist already. Whenever you make a call, this innovative PBX lets you choose the type of line: digital, analog, or even the internet. Even better, it can automatically route your call via the communication channel you have specified for a number. Plus, whenever you make a landline call, the COMpact 5010 VoIP selects a low-cost provider.

Choose your  
type of line

At Auerswald, innovation means being at the forefront of technology while also ensuring compatibility with existing systems. So you can carry on using your telephones and other terminal devices together with the latest system telephones of the COMfortel product family. This allows you to make optimum use of your new COMpact 5010 VoIP's capabilities.

You can, of course, configure all functions via the system's web interface. All you need is an operating system – e.g. Windows XP, Vista, Mac OS X or Linux – and a compatible web browser.

**NEW**



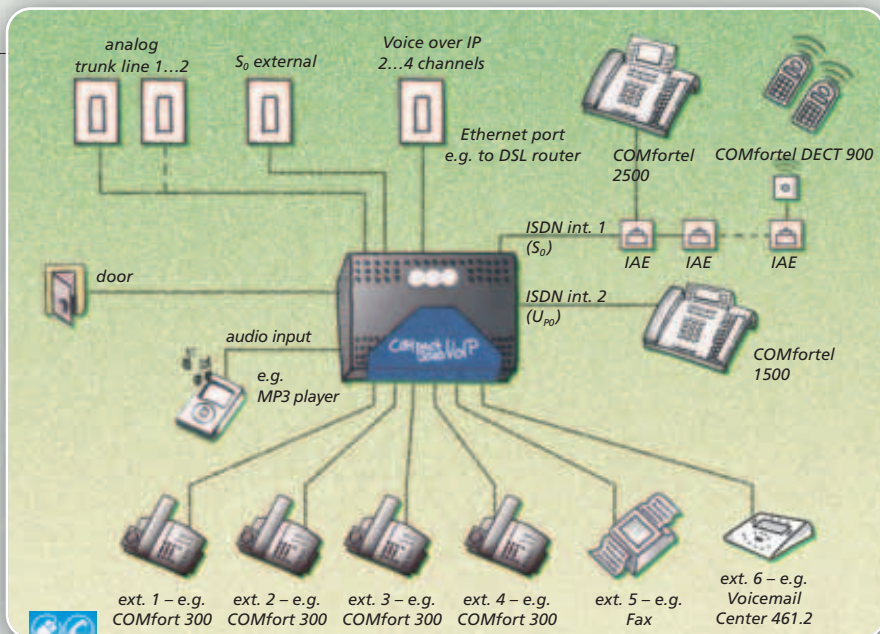
## COMpact 5020 VoIP

The COMpact 5020 VoIP has all the innovative features of the 5010 – and even more configuration options. It comes equipped with ten a/b ports for analog telephones or fax machines, two  $S_0/U_{p0}$  ports – one switchable, the other a fixed internal port for ISDN trunk line access or ISDN terminal devices – and two VoIP channels for internet telephony.

But that's not all – you can configure the COMpact 5020 VoIP to suit your specific requirements. One option: three ISDN trunk line ports, four VoIP channels and eight internal ISDN ports. Another: six analog trunk line ports, four VoIP channels and three internal ISDN ports. Or even mixed mode, with ISDN and analog trunk lines. And, of course, an amazing 26 extensions, if you need them. The 2-wire  $U_{p0}$  technology of the ISDN extensions also lets you use our high-tech COMfortel system telephones with an existing "plain old" analog line. One highlight, particularly for commercial users, is the COMpact 5020 VoIP's Automatic Reception function. It provides you with up to 10 independently functioning receptions, which you can cascade and use for multiple company operation.

### COMpact 5010 VoIP

- **Basic configuration** *Trunk line ports:* 1  $S_0$  port (can be switched to internal), 1 Ethernet port (2 VoIP channels), *Extension ports:* 1  $S_0/U_{p0}$  port, 6 a/b ports, *PC ports:* Ethernet
- **Maximum configuration** *Trunk line ports:* 1  $S_0$  port (can be switched to internal), 2 a/b ports (POTS), 1 Ethernet port (4 VoIP channels), *Extension ports:* 1  $S_0/U_{p0}$  port, 6 a/b ports, *Door ports:* 1 door port (1 door opener, 2 bell ports), *Miscellaneous:* 1 audio input/output
- **Technical Data** *Power supply:* earthed safety plug, 230 V +/-10 %, 50 Hz, max. 30 VA, *Trunk line ports:*  $S_0$  port(s), Euro-ISDN (DSS-1), PTMP/PTP connection, analog dial-up line, CLIP-enabled, pulse/tone dialling, *ISDN extension ports:*  $S_0$  and  $U_{p0}$  port(s), Euro ISDN (DSS-1), PTMP connection,  $U_{p0}$  range up to 1000 m, *Analog extension ports:* CLIP-enabled, pulse/touch-tone dialling, symmetrical, 2 x 50  $\Omega$  (approx. 790 m with  $\varnothing$  0.6 mm), *Ethernet port (LAN):* 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), full/half duplex auto-negotiation, *Case:* plastic chassis with cover, *Dimensions:* 301 mm x 243 mm x 86.5 mm, *Weight:* approx. 1500 g

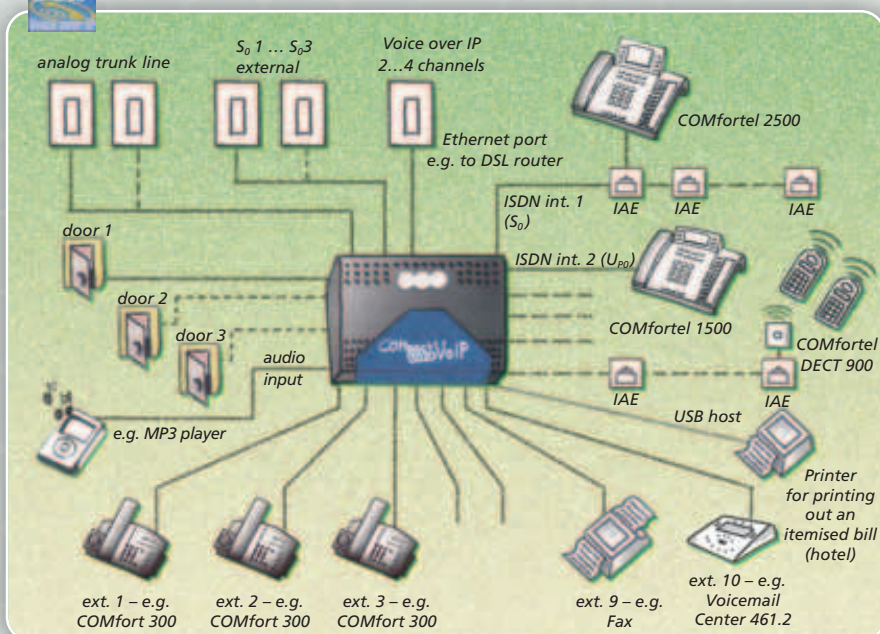


- Basic configuration with 2 VoIP channels, can be expanded to 4 VoIP channels
- Full VoIP system integration incl. automatic routing, call distribution, trunk line authorisations, barred and allowed numbers etc.
- Internal ISDN port can be configured as  $S_0$  or  $U_{P0}$  port
- Caller ID (CLIP and CNIP), also for analog ports
- Upgradable with door phone and switching functions <sup>21</sup>
- Least Cost Routing with automatic or manual updates of call rate tables <sup>23</sup>



### These options can be activated for COMpact 5010 VoIP / 5020 VoIP in the Upgrade Center:

- Additional LCR (extensions in increments of 8, up to 64), 8 included
  - Call-Through connections (all lines), factory settings permit 1 connection
  - Automatic Reception (enhanced Announcement before Answering)
  - Call configuration
  - Call records (in increments of 2000, up to 6000), factory settings permit 2000
  - LAN-TAPI (extensions in increments of 8, up to 60), 4 included
  - X.31 on internal  $S_0$  port (X.25 in D-channel)
- only for COMpact 5020 VoIP**
- Hotel Function (in-room telephones in increments of 8)



- Group functions with smart ringing options (all, linear or incremental)
- Operation of 16 COMfortel system telephones possible
- Waiting Field for 10 simultaneous external calls (ISDN, analog, VoIP) <sup>27</sup>
- Music on Hold (approx. 6 min.) with additional announcement (approx. 1 min.), can be uploaded from PC in WAV format
- Computer-assisted telephony within the LAN (Third Party CTI, LAN-TAPI) <sup>24</sup>
- Hotel Function with check-in / check-out <sup>26</sup>

## COMpact 5020 VoIP

● **Basic configuration** *Trunk line ports:* 1  $S_0$  port (can be switched to internal), 1 Ethernet port (2 VoIP channels), *Extension ports:* 1  $S_0/U_{P0}$  port, 10 a/b ports, *PC ports:* Ethernet, *Miscellaneous:* USB printer port (call record printout)

● **Maximum configuration** *Trunk line ports:* 3  $S_0$  ports (can be switched to internal), 6 a/b ports (POTS), 1 Ethernet port (4 VoIP channels), *Extension ports:* 8  $S_0/U_{P0}$  ports, 10 a/b ports, *Door ports:* 3 door ports (3 door openers, 6 bell ports), *Miscellaneous:* 1 audio input/output, 2 additional audio outputs

● **Technical Data** *Power supply:* earthed safety plug, 230 V +/-10 %, 50 Hz, max. 40 VA, *Trunk line ports:*  $S_0$  port(s), Euro-ISDN (DSS-1), PTMP/PTP connection, analog dial-up line, CLIP-enabled, pulse/tone dialling, *ISDN extension ports:*  $S_0$  and  $U_{P0}$  port(s), Euro ISDN (DSS-1), PTMP connection,  $U_{P0}$  range up to 1000 m, *Analog extension ports:* CLIP-enabled, pulse/touch-tone dialling, symmetrical, 2 x 50  $\Omega$  (approx. 790 m with  $\varnothing$  0.6 mm), *Printer port:* USB host V1.1, *Ethernet port (LAN):* 10/100 Base-T (10/100 Mbit/s, RJ-45 twisted pair), full/half duplex auto-negotiation, *Case:* plastic chassis with cover, *Dimensions:* 301 mm x 243 mm x 86.5 mm, *Weight:* approx. 1500 g

# COMpact

## COMpact 4410 USB

Just see for yourself: installing and configuring is beautifully simple. And then you're in control: you can make calls, send faxes, open doors, or use the integrated USB port for instant web access. And just think how much you can save: like other Auerswald systems, the COMpact 4410 USB offers Least Cost Routing, an integrated function that automatically dials the cheapest provider. External subscribers can benefit too, even from their mobile phones – with the smart Call Through function. The automatic update function keeps your system always up-to-date.

The COMpact 4410 USB comes with two  $S_0$  ports – one external and one internal. As your requirements increase, you can add a module with two more  $S_0$  ports – one fixed internal, the other one variable. The ten extension ports let you connect multiple analog terminal devices. You can also upgrade with two modules for door phone and switching functions. Its USB interface supports both CAPI and TAPI, so your COMpact 4410 USB can work as an ISDN adapter. And the audio input lets you not just record external Music on Hold – you can even hook up an amplifier or active speakers!





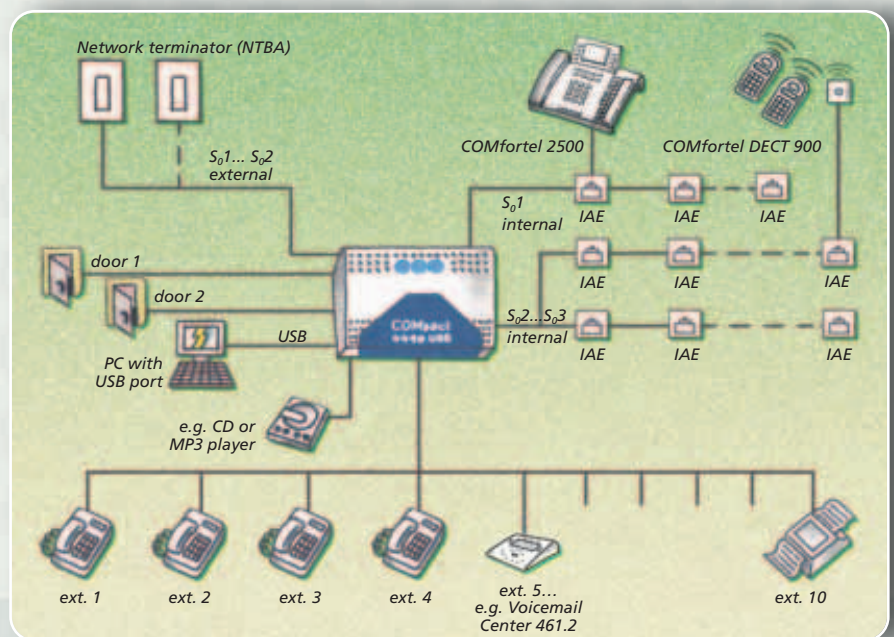
Enter **today** –  
Upgrade **tomorrow**



## COMpact 2206 USB

Perfect for smaller offices with a fixed setup offering two  $S_0$  ports – one external and one internal – plus six analog extension ports. It can be upgraded with one module for door phone and switching functions.

- Number and name display (CLIP and CNIP)
  - Integrated ISDN PC adapter functionality
  - USB port for configuration, CTI, data transfer and internet
  - Upgradeable door and switching functions
  - Least Cost Routing with support for internet telephony (VoIP via Auerswald Box) and mobile networks via GSM adapter 
  - Hotel Functions with check-in/check-out (with COMpact 4410 USB – 
  - Configuration tools for Windows, Linux and Mac OS X
- ➔ To view the whole range of functions and to compare the different systems, please refer to the back pages.








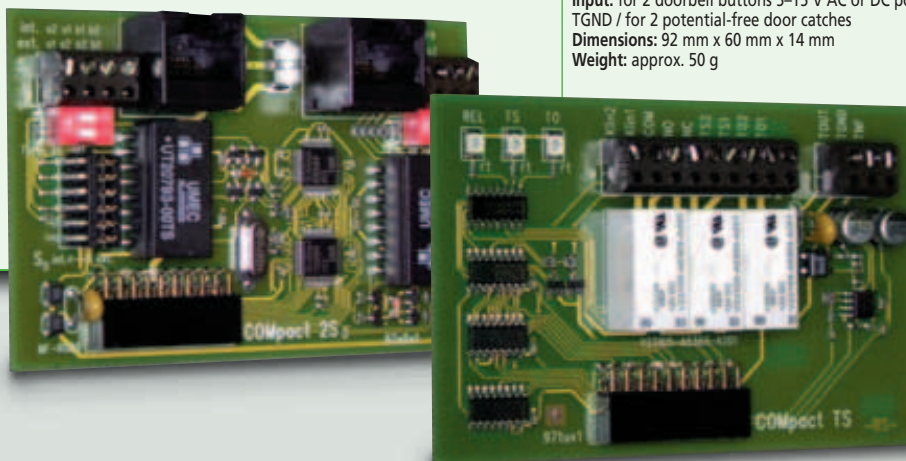
### COMpact 4410 USB (COMpact 2206 USB)

- **Basic configuration** Trunk line port: 1  $S_0$  port, Extension ports: 1  $S_0$  port, 10 analog ports, PC connections: USB, V.24, Miscellaneous: audio input/output (COMpact 2206 USB: 6 analog ports)
- **Maximum configuration** Trunk line port: 2  $S_0$  ports, Extension ports: 3  $S_0$  ports, 10 analog ports, Door ports: 2 door ports (4 door bells, 2 door openers) (COMpact 2206 USB: same as basic configuration plus 1 door port (2 door bells, 1 door opener))
- **Technical data** Power supply: earthed safety plug, 230 V  $\pm$  10 %, 50 Hz, 25 VA max., (COMpact 2206 USB: 16 VA max.) Trunk line port:  $S_0$  port(s), Euro ISDN (DSS-1), PTMP or PTP, Internal ISDN ports:  $S_0$  port(s), Euro ISDN (DSS-1), PTMP, Analog extension ports: CLIP-enabled, symmetrical, pulse/tone dialling, 2 x 50  $\Omega$  (approx. 790 m with  $\varnothing$  0.6 mm), PC/printer port: RS-232 C (V.24), 9600 baud, 8 n 1, PC/data port: USB (Full Speed, V1.1 compatible with V2.0), Case: plastic case with cover and snap-on lid, Dimensions: 301 mm x 243 mm x 86.5 mm, Weight: approx. 1500 g



More system telephones, a door entry system, or additional trunk lines – have a look at what the add-on modules for the different models of the COMpact product family can offer you.

	Description	Technical data	Max. number of modules usable with			
			COMpact 2206 USB	COMpact 4410 USB	COMpact 5010 VoIP	COMpact 5020 VoIP
<b>COMpact 2VoIP Module</b> 	Adds two VoIP channels for internet telephony. Provides additional codecs with voice compression to ensure optimum sound quality, even for smaller bandwidths for all four channels.	<b>Operating voltage:</b> from the COMpact unit <b>Installation:</b> slot inside the COMpact system <b>VoIP standard:</b> SIP as per RFC 3261 <b>VoIP codecs:</b> G.711, G.723.1, G.726, G.729A/E, iLBC <b>Dimensions:</b> 37 mm x 43 mm x 3 mm <b>Weight:</b> approx. 6 g	–	–	1	1
<b>COMpact POTS Module*</b> 	Adds an analog trunk line (POTS – plain old telephone service). The Caller ID feature (CLIP/CNIP) ensures you benefit from ISDN extras even with an analog line. Analog-only operation is possible, but as well mixed mode with ISDN and VoIP trunk lines.	<b>Operating voltage:</b> from the COMpact unit <b>Installation:</b> slot inside the COMpact system <b>Trunk line port:</b> analog dial-up line, pulse/tone dialling, CLIP-enabled (FSK/DTMF) <b>Dimensions:</b> 92 mm x 60 mm x 17 mm <b>Weight:</b> approx. 50 g	–	–	1	3
<b>COMpact 2POTS Module*</b> 	Adds two analog trunk lines (POTS – plain old telephone service). The Caller ID feature (CLIP/CNIP) ensures you benefit from ISDN extras even with an analog line. Analog-only operation is possible, but as well mixed mode with ISDN and VoIP trunk lines.	<b>Operating voltage:</b> from the COMpact unit <b>Installation:</b> slot inside the COMpact system <b>Trunk line port:</b> 2 analog dial-up lines, pulse/tone dialling, CLIP-enabled (FSK/DTMF) <b>Dimensions:</b> 92 mm x 60 mm x 17 mm <b>Weight:</b> approx. 50 g	–	–	1	3
<b>COMpact 2ISDN Module</b> 	Adds two variable ISDN ports (external/internal). When used as internal ports, either $S_0$ (4-wire) and $U_{p0}$ (2-wire) operation is possible. You can connect COMfortel system telephones or any other ISDN terminal device to the internal ISDN port.	<b>Operating voltage:</b> from the COMpact unit <b>Installation:</b> slot inside the COMpact system <b>Trunk line port:</b> 0-2 $S_0$ ports, Euro ISDN (DSS-1), PTMP or PTP connection <b>Internal ISDN ports:</b> 0-2 $S_0/U_{p0}$ ports, Euro ISDN (DSS-1), PTMP connection <b>Dimensions:</b> 92 mm x 60 mm x 16 mm <b>Weight:</b> approx. 50 g	–	–	–	3
<b>COMpact TSM Module</b> 	Adds a door terminal including a door opener and two bell ports. One of the bell ports can be used for an alarm system. An additional relay allows remote switching of electrical devices. If no door terminal is used, a total of three relays is available. The combined audio input/output lets you connect an MP3 player for external Music on Hold or a PA system for announcements.	<b>Operating voltage:</b> from the COMpact unit <b>Installation:</b> slot inside the COMpact system <b>Door entry ports:</b> compliant with FTZ 123 D12-0 <b>Max. load relay:</b> 30 V, 1 A <b>Input:</b> for 2 doorbell buttons 5–15 V AC or DC positive TGND / for 2 potential-free door catches <b>Dimensions:</b> 92 mm x 60 mm x 16 mm <b>Weight:</b> approx. 50 g	–	–	1	3
<b>COMpact 2S<sub>0</sub> Module</b>	Adds one fixed internal and one variable $S_0$ port (external/internal). You can connect COMfortel system telephones or any other ISDN terminal device to the internal $S_0$ port.	<b>Operating voltage:</b> from the COMpact unit <b>Installation:</b> slot inside the COMpact system <b>Trunk line port:</b> 0-1 $S_0$ ports, Euro ISDN (DSS-1), PTMP or PTP connection <b>Internal <math>S_0</math> ports:</b> 1-2 ports Euro ISDN (DSS-1), PTMP connection <b>Dimensions:</b> 92 mm x 60 mm x 17 mm <b>Weight:</b> approx. 50 g	–	1	–	–
<b>COMpact TS Module</b>	Adds a door terminal including a door opener and two bell ports. An additional relay allows remote switching of electrical devices. If no door terminal is used, a total of three relays is available.	<b>Operating voltage:</b> from the COMpact unit <b>Installation:</b> slot inside the COMpact system <b>Door entry ports:</b> compliant with FTZ 123 D12-0 <b>Max. load relay:</b> 30 V, 1 A <b>Input:</b> for 2 doorbell buttons 5–15 V AC or DC positive TGND / for 2 potential-free door catches <b>Dimensions:</b> 92 mm x 60 mm x 14 mm <b>Weight:</b> approx. 50 g	1	2	–	–



\* available from 3rd quarter 2007

# COMpact

**NEW**

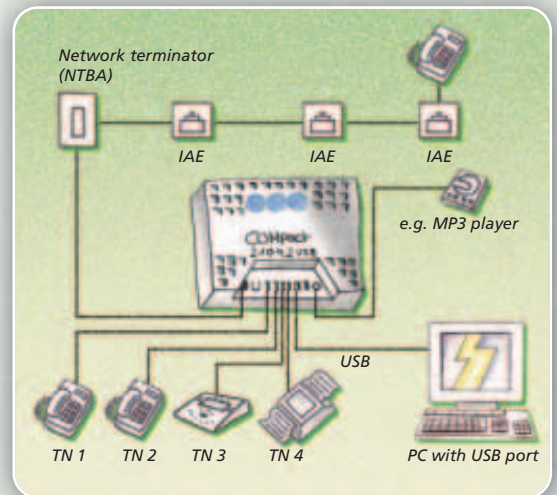
## COMpact 2104.2 USB

If you need a PBX system that is easy to use, has four extensions, but won't cost the earth, the COMpact 2104.2 USB is the system for you! It's an inexpensive investment that helps you save money every time you make a call: the built-in Least Cost Router automatically finds a low-cost network provider.

The COMpact 2104.2 USB comes with a USB-PC interface and our COMsuite software, providing state-of-the-art communication options such as computer-assisted telephony (CTI), use of your PC as a fax and answering machine, or data transfer and internet access.

The central telephone directory holds up to 400 names and numbers, allowing the system to retrieve callers' names and show them on your telephone display. And our COMlist software provides you with an itemised view of all call records – at no extra cost, of course.

With its ready-to-use case and the COMset software package, installation and setup of the COMpact 2104.2 USB are quick and simple, letting you enjoy the system's little luxuries within only a few minutes. Important for future use: The automatic update function ensures your system always has the latest operating software.



Pay little,  
get a lot

- Caller ID with number and name (CLIP/CNIP)
- Least Cost Routing, including as optional extras automatic updates of call rate tables and internet telephony (VoIP via Auerswald Box)
- Call Through – for low-cost calls from your mobile via the PBX system
- Set your own barred and allowed numbers for outgoing and incoming calls (dialler protection, Do-not-disturb)
- Six configurations (e.g. day/night mode, holiday mode), manual or timer-controlled operation

➔ *To view the complete range of functions and compare the different systems, please refer to the back pages.*

### COMpact 2104.2 USB

● **Configuration** Trunk line port: 1 S<sub>0</sub> port, Extension ports: 4 a/b ports, PC ports: USB

● **Technical Data** Power supply: AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, max. 9 VA, Trunk line port: S<sub>0</sub> port, Euro ISDN (DSS-1), PTMP/PTP connection, Analog extension ports: CLIP-enabled, pulse tone dialling, symmetrical, 2 x 50 Ω approx. 790 m with Ø 0.6 mm), PC/data port: USB (full speed, V1.1 compatible with V2.0), Case: plastic chassis with cover, Dimensions: 217 mm x 157 mm x 65 mm, Weight: unit approx. 540 g, AC adapter approx. 570 g

### COMfort 200

If you needed proof that inexpensive entry-level telephones can look modern and stylish, here it is: Auerswald's COMfort 200. It's also easy to use, with functions like Redialling or the abbreviated dialling memory.

- Analog telephone for use with Auerswald PBX systems or analog trunk lines
- Speed dial memory for frequently used numbers
- 10 abbreviated dialling numbers
- 3 different ring tones
- 3 different ringer volumes
- Desktop use or wall-mountable

**A stylish  
entry-level  
analog phone**



### COMfort 300

COMfort 300 is an easy-to-use analog telephone that's perfect for use with Auerswald PBX systems. Its modern and stylish design and the wide range of functions are definite points in favour – and it offers excellent value for money!



- 3-line illuminated display
- Phone book for up to 70 names and numbers
- Caller list of the last 61 calls, numbers can be copied to local phone book
- Redialling of the last 10 numbers dialed
- 3-number abbreviated dialling memory
- Display languages include English, German, French, Spanish
- Desktop use or wall-mountable

#### COMfort 200

● **Technical data** *Power supply:* analog port of the PBX system or telephone network, *System connection:* analog port of the PBX system or telephone network, *Controls:* Keypad with vanity code, 5 function keys, *Case:* plastic, black, *Dimensions:* 160 mm x 180 mm x 112 mm, *Weight:* approx. 460 g

#### COMfort 300

● **Technical data** *Power supply:* analog port of the PBX system or the telephone network (for basic functions), additional AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, 2.9 VA max. and 4 AAA batteries, *System connection:* analog port of the PBX system or telephone network, *Displays:* illuminated 3-line LCD, 1 LED, *Controls:* Keypad with vanity code, 12 function keys, 3 abbreviated dialling keys, *Case:* plastic, black, *Dimensions:* 252 mm x 189 mm x 112 mm, *Weight:* approx. 1000 g incl. AC adapter and batteries

# COMfortel®



What distinguishes the system telephones of the COMfortel range? They are intuitive to use, can be upgraded in modules, have a state-of-the-art design, and offer high investment protection. The development team wanted to create telephones that would be even easier and more efficient to use. You can access almost any function of your PBX system\* at the touch of a key. An LED next to the key shows you the status. Auerswald's COMfortel range has everything you want from a phone – an InterCom function for automatic hands-free operation, Power Dialling, and a central caller list for hunt groups.

**EXCLUSIVE**  
by AUERSWALD

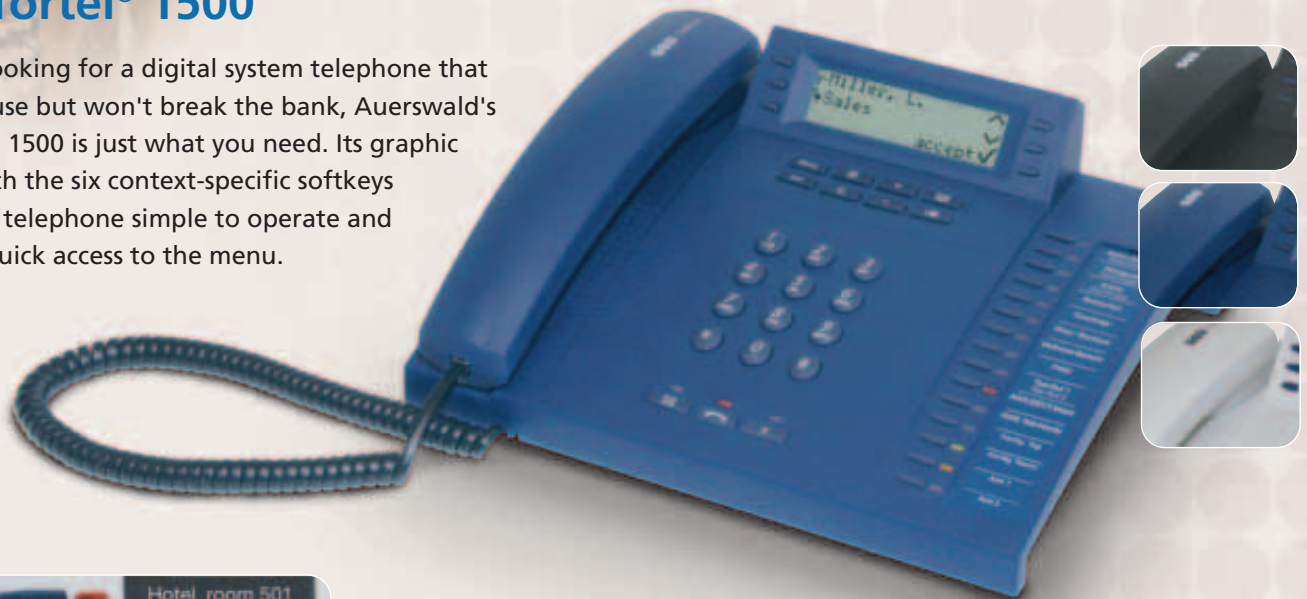
Both system telephones are suitable for connection to  $S_0$  and  $U_{P0}$  ports without any modification. They even detect the type of port and adjust automatically. And they manage all that without any additional power supply.

Our system telephones COMfortel 1500 and COMfortel 2500 are available in black, dark blue, and light grey (white). Whichever model you opt for – it will bring perfect ease of use to your home or office. The operating software's automatic update function ensures you always have the latest technology.

\* COMPact 2204 USB, 2206 USB, 4410 USB, 5010 VoIP, 5020 VoIP and COMmander Basic, Basic.2, Business

## COMfortel® 1500

If you're looking for a digital system telephone that is easy to use but won't break the bank, Auerswald's COMfortel 1500 is just what you need. Its graphic display with the six context-specific softkeys makes the telephone simple to operate and provides quick access to the menu.



- Access to the system telephone directory, plus up to 400 entries in the telephone's own phone book
- Caller list for the last 30 missed calls
- Busy indicators for extensions and trunk lines
- Speakerphone/Hands-free, phone lock, emergency calls possible

➔ To view the whole range of functions and to compare the different telephones, please refer to the back pages.

### COMfortel® 1500

● **Technical data** **Power supply:** PBX system's internal  $S_0$  or  $U_{P0}$  port, max 2 W, **System connection:** PBX system's internal  $S_0$  or  $U_{P0}$  port, **Displays:** 128 x 32 pixel LCD, 18 LEDs (some multicolour), **Controls:** Keypad with vanity code, 11 function keys, 6 softkeys, 15 programmable function keys (2 levels), **Handset:** Electret microphone, dynamic speaker, hearing aid-compatible, **Speakerphone:** 8  $\Omega$ ,  $\varnothing$  66 mm, **Hook switch:** magnetic, **Case:** plastic; black, dark blue, or light grey (white), **Dimensions:** 261 mm x 89 mm x 216 mm, **Weight:** approx. 980 g






## COMfortel® 2500

Excellent performance

You use the telephone frequently, and you want a phone that is "just right". Then how about our digital system telephone COMfortel 2500? Its large illuminated graphic display with the eight context-specific softkeys makes the telephone easy to operate and provides quick access to the menu. An integrated USB interface and the COMsuite software package that comes with the phone ensure simple data communication – no need for additional hardware!

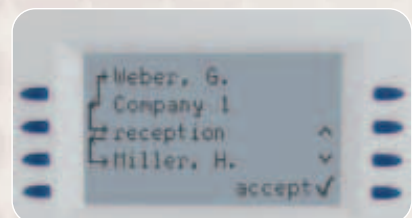
The COMfortel 2500's modular concept lets you add up to three COMfortel Xtension30 modules for extra function keys. You can fit them on either side of your telephone. With all modules fitted, you have 105 function keys available.


- Access to the system telephone directory, plus up to 800 entries in the telephone's own phone book
- Status line provides information such as Call Forwarding, Mute, or Hands-free active
- Hotel Function (reception telephone) 
- Headset jack with DHSG support for wireless headsets
- Easy-to-operate answering machine (optional)

COMfortel 2500 with one COMfortel Xtension30 module



**COMfortel 2500:** The large illuminated display shows the complete connection path including the extension which has forwarded the call.



 You need a standard SD card to save your announcements and messages on the integrated answering machine. Why not test this function for 30 days before deciding to buy, at the Auerswald Upgrade-Center.

**NEW**

### COMfortel® 2500

● **Technical data** **Power supply:** PBX system's internal  $S_0$  or  $U_{10}$  port, max 2 W, **System connection:** PBX system's internal  $S_0$  or  $U_{10}$  port, **PC/data port:** USB, **Displays:** illuminated 128 x 64 pixel LCD, 18 LEDs (some multicolour), **Controls:** Keypad with vanity code, 11 function keys, 8 soft keys, 15 programmable function keys (2 levels), **Handset:** Electret microphone, dynamic speaker, hearing aid-compatible, **Speakerphone:** 8  $\Omega$ ,  $\varnothing$  66 mm, **Hook switch:** magnetic, **Case:** plastic; black, dark blue, or light grey (white), **Dimensions:** 261 mm x 109 mm x 216 mm, **Weight:** approx. 1120 g

### COMfortel® Xtension30

● **Technical data** **Power supply:** via COMfortel 2500 (AC adapter for COMfortel 2500 required), **Displays:** 30 LEDs (multicolour), **Controls:** 30 programmable function keys (2 levels), **Case:** plastic; black, dark blue, or light grey (white), **Dimensions:** 146 mm x 55 mm x 216 mm, **Weight:** approx. 410 g

### COMfortel® XT-PS

● **Technical data** **Operation voltage:** 230 V +/- 10 %, 50 Hz, **Output voltage:** 24 V DC nom., **Power consumption:** max. 11 VA, **Connection cable:** approx. 3 m RJ-45 connector (8 pin), **Case:** plastic; black, **Dimensions:** 55 mm x 76 mm x 42 mm, **Weight:** approx. 340 g

## COMfortel® VoIP 250

available from  
3<sup>rd</sup> quarter 2007

With your ISDN telephone, you've become used to some luxuries that you wouldn't want to miss after switching to a VoIP line. You'll be looking for a VoIP phone that offers you a wide range of functionalities, top quality "made in Germany", state-of-the-art design, and many technical highlights. Look no further – here's the Auerswald COMfortel VoIP 250, a stand-alone phone that you can hook up to your network, no PBX system required.

Even the installation is quick and easy: thanks to Power over Ethernet (PoE) technology, your COMfortel VoIP 250 won't need an extra power supply. And if the network port is used by your PC, simply route the connection through the COMfortel VoIP 250, with its two Ethernet ports.

The telephone's large backlit graphic display and the softkeys make it extremely easy to operate right from the start. You can use the 15 programmable function keys with multicolour LEDs for a number of tasks: Programme them as abbreviated-dialling keys, and you can make calls at the touch of a key.

Or assign the Presence function to a key to show a subscriber's status (online/offline, compliant with RFC 3856). The keys can also give you quick access to useful functions such as call forwarding (unconditional, on busy, no reply) or call waiting. If required, up to three COMfortel Xtension30 keypad extensions can be added, with up to 30 keys and LEDs each.

And here is a little bonus for frequent callers: COMfortel VoIP 250 lets you connect a wireless headset (DHSg).

- SIP-compliant as per RFC 3261
- 10 SIP accounts, 4 active simultaneously (trunk lines)
- Security: SIPS and SRTP as per RFC 4568
- VoIP codecs: G.711, G.726, G.729, G.723.1, GSM 6.10 (full rate)
- Excellent sound quality with echo cancellation and comfort noise generation (CNG)
- Classification of voice packets (DiffServ)
- Redial, last caller, and call lists with up to 30 entries each
- Phone book for up to 200 entries and SIP account allocation
- Spam protection, unknown/anonymous caller blocking (based on phone book entries)



Because the capabilities of internet telephony are evolving rapidly, the COMfortel VoIP 250 comes equipped with an operating system that is already prepared for new features and ideas (OpenWRT).

**NEW**



### COMfortel VoIP 250

● **Technical data** **Power supply:** Power over Ethernet (PoE compliant with IEEE 802.3af), poss. via PoE adapter, **System connection:** Ethernet 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), **PC/Data port:** Ethernet 10/100 Base-T (10/100 MBit/s, RJ-45 twisted pair), **Displays:** white illuminated 128 x 64 pixel LCD, 18 LEDs (some multicolour), **Controls:** keypad with vanity code, 11 function keys, 8 soft keys, 15 programmable function keys (2 levels), **Handset:** Electret microphone, dynamic speaker, hearing aid-compatible, **Speakerphone:** 8 Ω, 66 mm Ø, **Hook switch:** magnetic, **Case:** plastic; black, dark blue, or light grey (white), **Dimensions:** 261 mm x 109 mm x 216 mm, **Weight:** approx. 1200 g



## COMfortel® DECT 900

Making phone calls with excellent sound quality wherever you are and control the Auerswald system cordless – that's only possible with the system telephone COMfortel DECT 900. With this outstanding DECT terminal you can switch over system configurations, open the door or activate a call forwarding – easily done with the mobile handset. Call transfer, conference or reject – you simply control everything with softkeys.

- Back-lit graphic display
- 140 entries in the telephone's local phone book, can be synchronised with the PBX system's central telephone directory
- Call identification (external/internal), 10 polyphonic and 5 standard ring tones
- Headset jack
- Up to 147 hours of standby operation with the handset
- Hands-free operation with mobile handset



The COMfortel DECT is the cordless system solution for COMpact 2204 USB, 2206 USB, 4410 USB, 5010 VoIP, 5020 VoIP and COMmmander Basic, Basic.2, Business

## COMfortel® DECT 900 Base

Simply connect the base station to a free internal S<sub>0</sub> port on your PBX system. This will also provide the power supply, so there's no need for an extra 230 V adapter.

- Login of max. 5 COMfortel DECT 900 Handsets (suggested: 3 handsets)
- Easy to mount on wall or ceiling
- Login of the handsets via the configuration software of the PBX

## COMfortel® DECT 900 Repeater.2 / COMfortel® DECT Antenna

Get even more freedom: up to six repeaters provide an easy range maximisation due to the automatic handover of the call. With a COMfortel DECT Antenna connected to the repeater, even separate buildings can be wirelessly connected to the COMfortel DECT system, bridging distances of up to 1000 metres.

➔ To view the whole range of functions and to compare the different telephones, please refer to the back pages.



**Total mobility and ease of use**

### COMfortel® DECT 900 System

● **Technical data system** *Transmission protocol:* DECT/GAP, *Transmission channels:* up to 2 concurrent speech channels, *Range:* up to 300 m outdoors, up to 50 m indoors, when using COMfortel DECT Antenna, up to 1000 m outdoors

● **Technical data base** *Power supply:* PBX system's internal S<sub>0</sub> port, max 1 W, *System connection:* PBX system's internal S<sub>0</sub> port, *Case:* plastic, black, *Dimensions:* 126 mm x 133 mm x 42 mm, *Weight:* approx. 205 g

● **Technical data handset** *Operation time:* up to 147 hours standby time, up to 17 hours talk time, *Battery charging time:* 13 hours max., *Display:* illuminated 102 x 65 pixel LCD, *Case:* plastic, black/silver, *Dimensions:* 50 mm x 153 mm x 29 mm, *Weight mobile unit:* approx. 150 g, incl. batteries, *Weight charger:* approx. 75 g, *Weight power supply:* approx. 209 g

### COMfortel® DECT Repeater.2

● **Technical data** *Power supply:* AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, max. 5.8 VA, *Directional aerial socket:* SMB male, *Cascading:* with separate software package (Windows operating system), *Case:* plastic, black, *Dimensions:* 120 mm x 130 mm x 31 mm, *Weight:* approx. 135 g

### COMfortel® DECT Antenna

● **Technical data** *Directional aerial socket:* with RF cable (included), SMB female, *Case:* plastic, grey, *Dimensions:* 101.5 mm x 95 mm x 31.5 mm, *Weight:* approx. 100 g

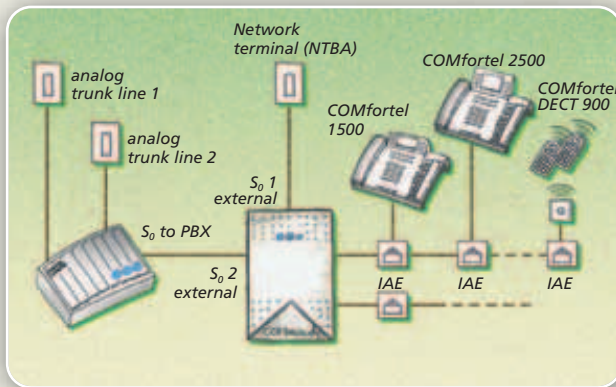


## Convenience for analog trunk lines

## Analog/ISDN Converter

Auerswald's Analog/ISDN Converter is a unique product that provides a quick and easy solution for operating an ISDN PBX system on an analog line. The Converter is perfect for use with any Auerswald ISDN system, but you can easily use it with other manufacturers' systems.

It supports all major functions of an analog line and converts them to ISDN services, which are available with the ISDN telephone system connected. Another benefit: All services your ISDN PBX system provides, such as a central Waiting Field or the automatic switchboard, are still available!



- Suitable for mixed connections (analog and ISDN)
- Number and name display (CLIP and CNIP) including date and time
- Call Forwarding (busy / no reply / unconditional)
- Call Transfer (HOLD)
- Conference Calls (3PTY)
- Automatic Callback (CCBS)

### Analog/ISDN Converter

● **Configuration** *Trunk line ports:* 2 analog ports, *Extension port:* 1 S<sub>0</sub> port, *PC port:* USB, *Miscellaneous:* S<sub>0</sub> synchronisation port

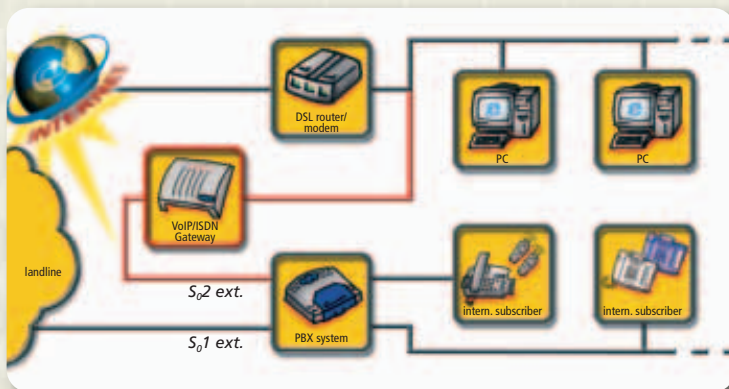
● **Technical data** *Power supply:* AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, max. 9 VA, *Trunk line port:* analog trunk line, tone-dialling (DTMF), *ISDN extension ports:* S<sub>0</sub> port, Euro ISDN (DSS-1), point-to-multipoint connection (PTMP), *Synchronisation port:* S<sub>0</sub> port (loop-thru) PTMP or PTP, *PC/data port:* USB (Full Speed, V1.1 compatible with V2.0), *Housing:* plastic chassis with cover, *Dimensions:* 217 mm x 157 mm x 65 mm, *Weight:* unit approx. 580 g, AC adapter approx. 400 g

## VoIP/ISDN Gateway

Calling via the internet using Voice over IP (VoIP) is becoming more and more popular, because this technology offers substantial cost benefits. Here's how you can save money: Simply connect the VoIP/ISDN Gateway between your DSL router and your telephone system to benefit from free\* internet telephony – and outstanding sound quality.

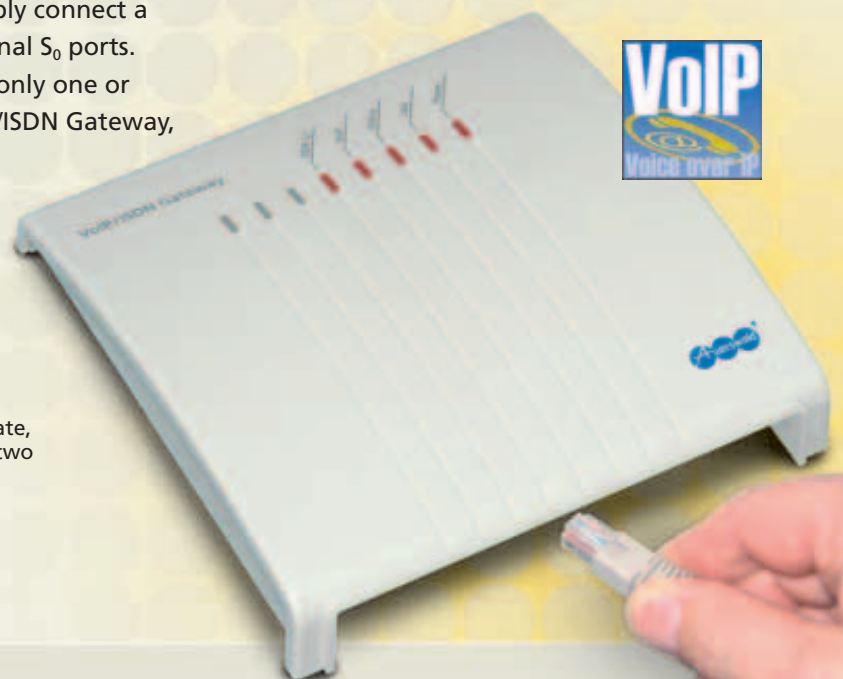
It won't cost you any extra, because you don't have to buy a new telephone or system – just carry on using your hardware. And there's no need to make any changes to your system: add the VoIP/ISDN Gateway and the new options are available instantly! Your Auerswald PBX even lets you choose the type of line – ISDN or internet – for individual telephone numbers and dials them automatically\*\*, so you can keep telephone costs low.

## Your gateway to internet telephony



- Voice over IP with ISDN telephone systems
- 2 simultaneous VoIP calls
- Up to 10 SIP lines
- Free\* calls
- Caller ID with number and name (CLIP/CNIP)
- Simple installation
- Configuration and software updates via a web browser

If you decide to switch to VoIP completely, simply connect a VoIP/ISDN Gateway to each of your PBX's external  $S_0$  ports. Or maybe you don't have a telephone system, only one or several ISDN telephones? You can still use VoIP/ISDN Gateway, and all your calls will go via the internet.



\* This requires broadband internet access and a flat rate, which may result in additional costs. Calls between two subscribers with the same provider or a partner are generally free of charge. For details, please contact your VoIP provider.

\*\* With VoIP/GSM Routing, included with all the latest Auerswald ISDN PBXs.

### VoIP/ISDN Gateway

● **Technical data** *Operating voltage:* 230 V  $\pm$  10 %, 50 Hz, *Power consumption (idle mode):* 6 W max,  *$S_0$  bus voltage:* 40 V +5/-15 % 4 W max, *Ethernet connection:* 10/100 Mbit/s, Western jack RJ-45 (8/8), automatic crossover detection, *ISDN connection ( $S_0/1$ ):* NT-simulation, PTMP or PTP, Western jack RJ-45, *Synchronisation connection ( $S_0/2$ ):* PTMP or PTP, Western jack RJ-45, *LED status display:* Power, LAN, Online, VoIP, ISDN, *Case:* plastic, light grey, *Dimensions:* 174 mm x 174 mm x 36 mm (w x d x h), *Weight:* 390 g (device), 570 g (power supply)

## Voicemail Center 461.2

Auerswald's Voicemail Center 461.2 is the ideal complement for many of the current Auerswald PBX systems. When used together with COMfortel system telephones, it has even more professional functions to offer. A flashing LED on the telephone signals incoming messages (ICMs), and you can operate the mailboxes from the phone at the touch of a function key. Voicemail Center 461.2 even calls you or sends you an SMS message whenever there's a new ICM waiting for you. It even shows you the caller's number and name if this information is available in the system's phone book.

Whether you retrieve ICMs from a telephone or even from a remote site – the user-friendly menu makes Voicemail Center 461.2 really easy to operate!



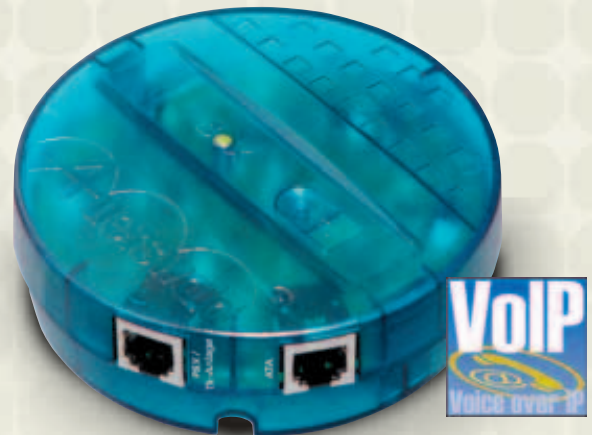
- 4 private mailboxes / 1 global mailbox
- 60 minutes recording capacity, 10 announcements
- Display: caller's number or name (CLIP/CNIP)
- Audio input and output for recording or archiving
- Perfect system integration with Auerswald's PBX systems of the COMpact range and COMmander range

## Auerswald Box



The Auerswald Box connects two analog extensions (a/b ports) and opens up undreamed-of possibilities with this trick. Decide for yourself: do you want to ...

- ... make low-cost or even free\* phone calls via the Internet?
- ... use your existing PBX system\* for calls via the Internet – even abroad?
- ... make low-cost or even free Internet calls\*\* with your existing DECT system?
- ... save telephone costs with your mobile – using the Call-Through function of a PBX system?
- ... make calls with your mobile and pay only the rates of landlines?
- ... save money with free connections between two PBX systems \*\*\*?



- \* Requires a PBX system with analog extensions offering DTMF dialling and a functioning ATA (analog telephone adapter) from your VoIP provider.
- \*\* Requires a contract with a VoIP provider and a suitable internet connection referable including flat rate. Please contact your VoIP provider for details.
- \*\*\* Please note the legal regulation governing telephone connections beyond property boundaries.



A detailed function description of the above mentioned examples you will find at [www.auerswald.com](http://www.auerswald.com).

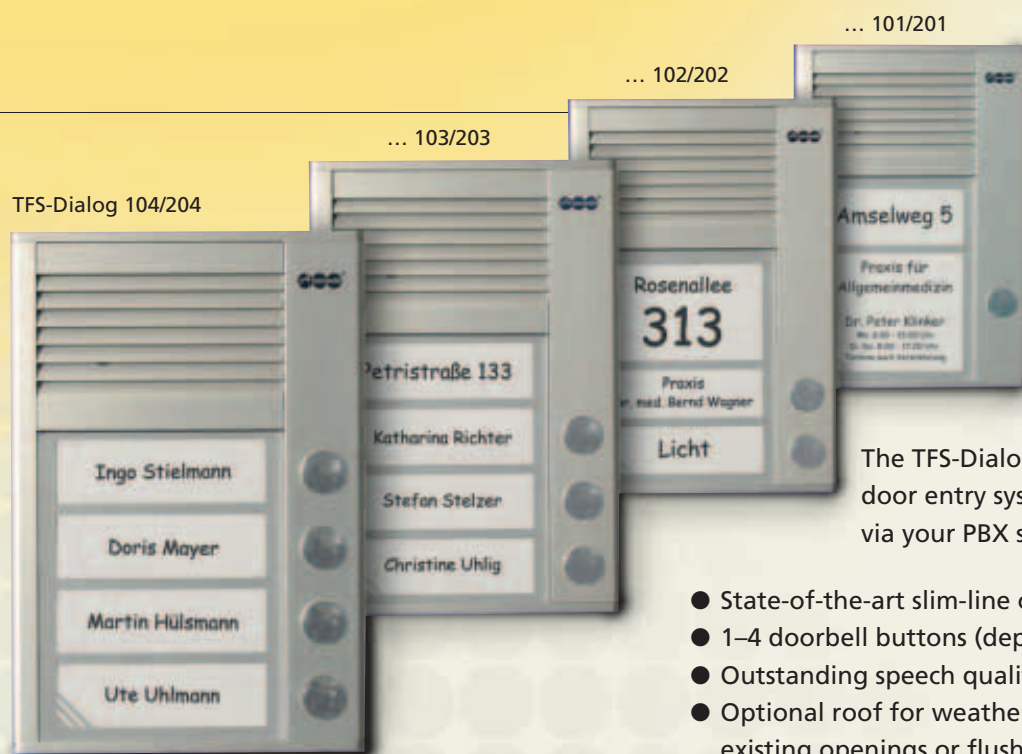


### Voicemail Center 461.2

● **Technical data** **Power supply:** AC adapter with Euro plug, 230 V +/-10 %, 50 Hz, 2.5 VA max., **System connection:** analog port of the PBX system, **Audio ports:** 1 line-out jack (150 mV / 10 kΩ), 1 line-in jack (150 mV / 47 kΩ), **Announcements:** 6 global, 4 private, 3 sec. to 60 min., **Recordings:** up to 199 ICMs, digital (PCM 64/128 KBit/s), up to 60 min. (incl. OGMs), **Display:** illuminated 64 x 128 pixel LCD, **Case:** plastic, dark blue/silver, **Dimensions:** 220 mm x 190 mm x 50 mm, **Weight:** approx. 540 g (desktop unit), approx. 270 g (AC adapter)

### Auerswald Box

● **Technical data** **Operating Voltage:** analog port of the PBX system (20 mA min., loop voltage 20 V), **System connection:** analog port of the PBX system or ATA, **Case:** plastic, 2 parts, **Size:** Ø 95 mm x 33 mm, **Weight:** approx. 100 g, **Colour:** blue, translucent



## TFS-Dialog product family

The TFS-Dialog 100 and TFS-Dialog 200 door entry systems let you talk to visitors via your PBX system's FTZ or a/b interface.

- State-of-the-art slim-line case, only 16 mm high
- 1–4 doorbell buttons (depending on the model)
- Outstanding speech quality
- Optional roof for weather protection and to cover existing openings or flush-mounting boxes

### TFS-Dialog 100

(FTZ models 101, 102, 103, 104)

- For operation via the TFE port (compliant with FTZ 123 D 12-0) of a PBX system by Auerswald or another manufacturer
- Doorbell button can be used to operate light



### TFS-Dialog 200

(a/b models 201, 202, 203, 204)

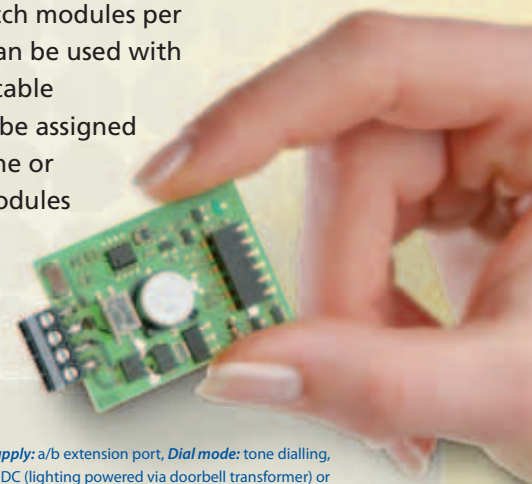
If your PBX system has no TFE port, choose the TFS-Dialog 200. It is connected directly to one of your system's a/b ports using a 2-wire cable, and it works almost like a telephone: at a push of the doorbell button, an (internal/external) number is automatically dialed.

- Operation on an analog extension of your PBX system made by Auerswald or another manufacturer
- Telephone numbers and basic functions can be programmed via the telephone
- Nameplate lighting requires no extra power supply
- Two levels of sensitivity for noisy and quiet environments
- Switch for door opener, doorbell or light (requires doorbell transformer)

### Analog switch module for TFS-Dialog 200

Auerswald's a/b switch modules are made especially for TFS-Dialog 200. They can be connected anywhere on the a/b line between the door entry and PBX systems, allowing you to use an existing doorbell or to switch on the stairway light.

- Up to six a/b switch modules per TFS-Dialog 200 can be used with only one 2-wire cable
- Each button can be assigned to and control one or several switch modules



#### TFS-Dialog product family

● **Technical data** Speaker: 50 mm, Case: anodised aluminium profile, Dimensions (L x H x W): 104 mm x 153 mm x 16 mm, Weight: approx. 360 g

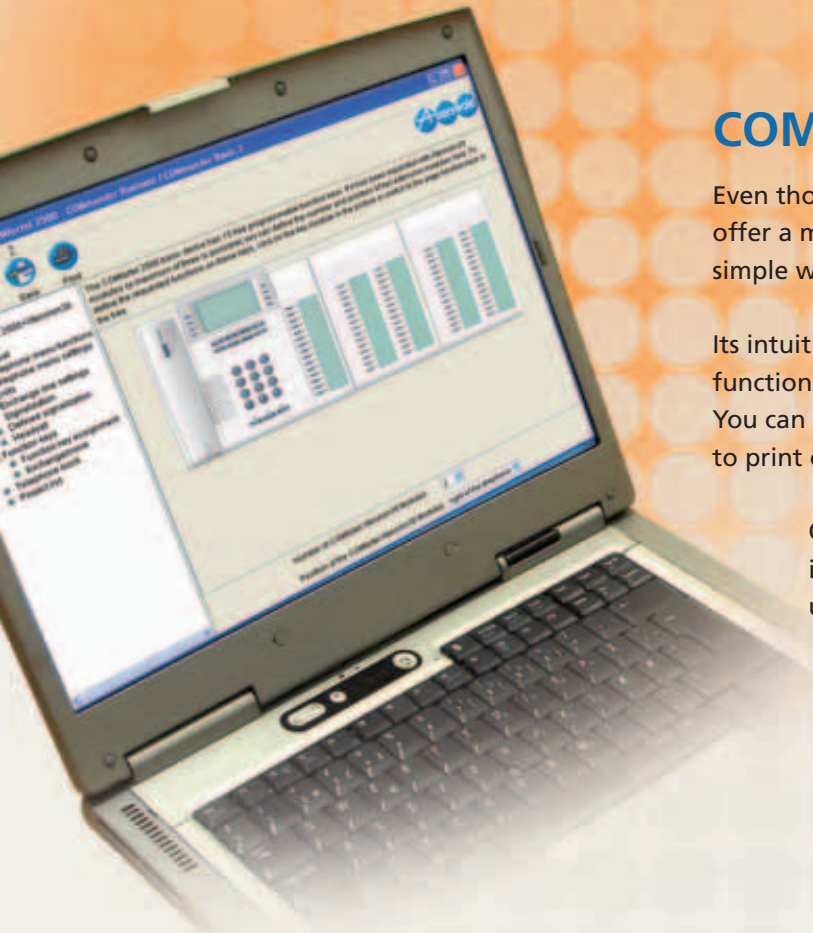
#### TFS-Dialog 100

● **Technical data** Power supply: PBX system's door port, 12–24 V DC or 11–18 V AC, typically 75 mA, incl. lighting, Door port: compliant with FTZ 123 D12-0, Max. load doorbell button: 30 V, 1 A

#### TFS-Dialog 200

● **Technical data** Technical data Power supply: a/b extension port, Dial mode: tone dialling, Operating voltage from a/b port: 16–60 V DC (lighting powered via doorbell transformer) or 19–60 V DC (lighting powered via a/b port), Operating voltage from doorbell transformer (optional): 8–18 V AC, 40 mA, Loop current, dependent on operating mode: <1 mA / 20–60 mA, Max. contact load door opener: 18 VAC / 40 V DC, 2 A, Contact load door port and stairway lighting: 18 V AC / 40 V DC, 0.5 A

# Setup



## COMfortel® Set

Even though the system telephones of the COMfortel range offer a multitude of functions, configuration is beautifully simple with the clearly structured COMfortel Set application.

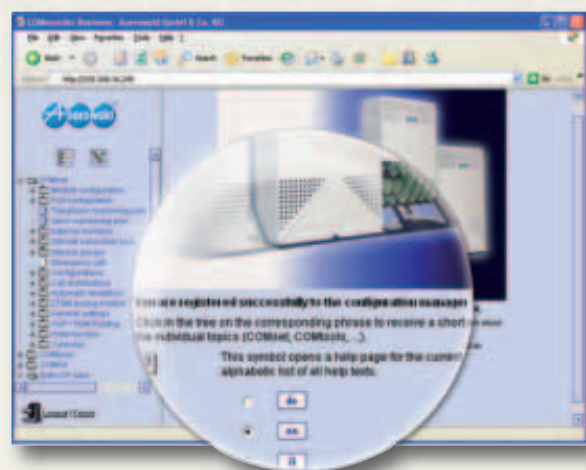
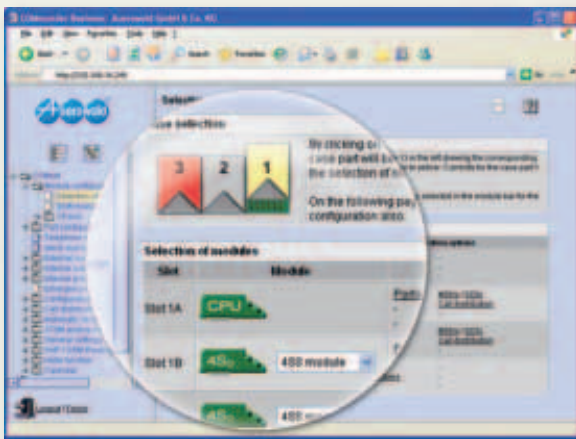
Its intuitive and easy-to-use interface lets you quickly assign functions to a key, or configure it as a busy indicator light. You can use the internal print function, for instance, to print out the local phone directory.

Or you could create your own ring tones for incoming calls and upload them to the telephone, using the COMfortel Melody add-on.

## Configuring system telephones

## COMset

Our COMset software lets you make the most of the functions your Auerswald system has to offer. Whether you're using our smaller COMpact 2104.2 USB or the larger COMpact 4410 USB, the COMset application helps you quickly configure the features you want.



In a first step, you specify your system's current configuration. You will then be offered all the features available for this hardware configuration. Since all settings are clearly organised in a folder structure, you only have to go through them step by step, so there's no danger of missing any setting. You can transfer this configuration to your PBX system via the USB port, the internal S<sub>0</sub> bus, or even from a remote location. A password prevents any unauthorised access.

If you have a COMpact 5010 VoIP, COMpact 5020 VoIP, COMmender Basic.2 or COMmender Business system, you only need a PC and web browser to configure it. Simply call up the appropriate page on your browser. Access is possible from any computer within the network. The web interface makes it easy to install firmware updates and add-ons.

## Full feature control

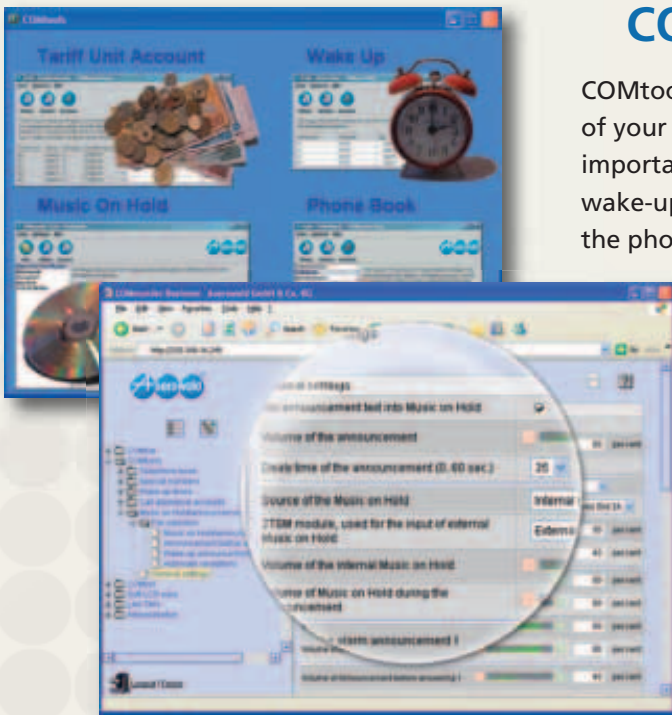


## COMtools

COMtools is a collection of handy software tools for everyday use of your PBX system. They make it even easier to update the most important entries in the system's telephone directory, or enter new wake-up times. You can save telephone numbers and names in the phone book, including their respective released and restricted numbers, and you can sort the numbers by name if you want. To record a new tune or adjust the volume, simply use the COMtools Music on Hold program.

If you have a COMpact 5010 VoIP, COMpact 5020 VoIP, COMmander Basic.2 or COMmander Business system, you can access the COMtools via a web interface. This allows all authorised subscribers in the PC network to update the system's telephone directory, record new announcements, or recharge their prepaid account.

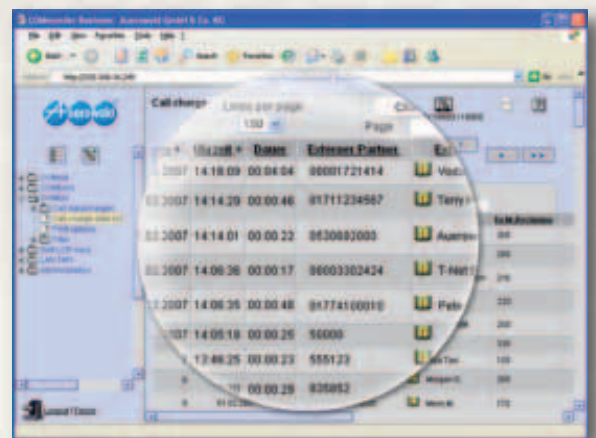
**Simplify** everyday tasks



## COMlist Managing call records

All Auerswald PBX systems with a call record memory store the data of every external call. To get the most out of this feature, Auerswald's current ISDN PBX systems include the COMlist software. This is an intuitive and easy-to-use application for managing your call records and statistics. Call records may include number dialed, caller's number, extension, date, time, and length of call. These data are initially stored in the system, where they are protected from network failure.

For call statistics, you can filter and save the data according to a variety of criteria. A filter wizard helps you set up filter profiles, so you can display call records for individual departments, subscribers, groups or projects with one mouse click. You can then sort the filtered data and archive them on your PC. The program also lets you print out neat and clearly structured call statistics on your PC printer.



## Soft-LCR

Auerswald PBX systems really help you save money – with built-in Least Cost Routing (LCR). For any call you make, the system automatically prefixes the number you have dialed with the correct code for a low-cost provider. Soft-LCR lets you manually enter your "low-cost" dialling codes in a table. Or you could save time and simply get a table of low-cost numbers especially for your system from a specialist provider.

## Save even more

## Auerswald COMsuite

If you want to carry out telephony tasks from your computer, you need powerful UMS and CTI applications and suitable interfaces with your PBX system or system telephone. The Auerswald COMsuite software package has a number of interesting options for integrating telephone and data communication.



**COMsuite CTI ControlCenter** – lets you access the most important COMsuite functions from the Windows® task bar.



**COMsuite CTI (telephone)** – simplifies or automates many functions that you would normally have to carry out manually on your telephone. For example, it lets you dial numbers directly from an application or from your computer's address book. The range of functions also includes speed dial numbers on your desktop, or sending SMS text messages.

**COMsuite VOICE (answering machine)** – a software-based answering machine that is very easy to use. Its maximum recording length is limited only by the size of your computer's hard disk! The range of features also includes remote access, or the archiving of recorded messages.

**COMsuite FAX (fax)** – lets you send and receive fax documents to and from Group 3 or 4 fax machines. You can also fax documents directly from Microsoft® Outlook®, Word or Excel.

**COMsuite EFT (EuroFile transfer)** – allows you to transfer data between two computers via ISDN at a speed of 64 Kbit/s.

**COMsuite ALARM** – lets you assign a sound file (WAV format) to almost every COMsuite action, to notify you of a Euro File transfer, an incoming fax...

**Microsoft Office integration** – By integrating COMsuite CTI with your Microsoft Office environment\*, you can use PC-based telephony from a familiar software environment (MS Outlook®, MS Access, or MS Excel). When you receive or make calls, the address data for the person you are speaking to are immediately displayed. You can also dial out directly from these Office applications.

\*Tested with Microsoft® Office 2000, XP, 2003

## Auerswald LAN-TAPI

CTI solutions are used everywhere – specially in business environments. Auerswald's newly developed LAN-TAPI provides a TAPI 2.1 network interface via the Ethernet port of the telephone system\*. Any authorised dealer can activate this function via the Upgrade Center, at no extra cost for the first four users.

In Microsoft Windows, a computer will allocate the functionality to individual computers within the network, making TAPI functions available to telephony software applications\*\* (such as OSITRON CTI or other CTI applications).

- MSNs called (multiple company operation)
- Call Forwarding (CFU, CFB, CFNR)
- Call Deflection (diverts calls before they are answered)
- Conference (3PTY), Call Transfer with/without consultation, Pick-up
- Caller ID displayed/hidden (CLIP/CNIP)
- Connected line ID (COLP)

\* COMpact 5010/5020 VoIP, COMmander Basic.2/Business

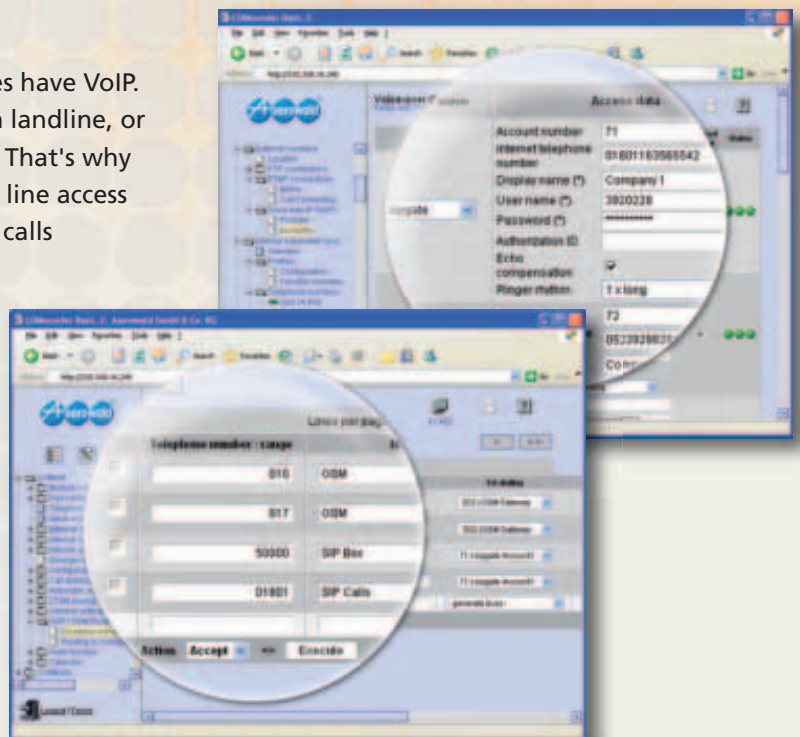
\*\* Analog or ISDN phones of other manufacturers may not offer the complete functionality

## Integrated VoIP functionality

If you have a COMpact 5010 VoIP, COMpact 5020 VoIP, COMmader Basic.2 or COMmader Business system, you can integrate it with your existing network via the built-in Ethernet port. This will allow you to make VoIP calls. You can quickly and easily configure all the settings you need for the VoIP functionality via the web interface, including call distribution, CLIP, or a preferred trunk line. Just enter your provider's technical server data and the access data for each account. Then use the Call Distribution function to route VoIP calls to the correct extension.

You can configure the routing so that the VoIP line is the preferred line for all outgoing trunk calls. When all available VoIP lines are in use, the system will simply use landline connections instead.

Free calls are normally only possible if both parties have VoIP. There is a charge if you call a VoIP number from a landline, or you call a landline number via your VoIP account. That's why the system lets you set a specific account or trunk line access for every number or number range used to make calls (permitted numbers). This will even let you answer intercom calls to a remote PBX system via VoIP.



## VoIP migration of existing systems

Even if your PBX system is not VoIP-enabled, you can still benefit from Auerswald's internet telephony solutions. Simply connect the Auerswald VoIP/ISDN Gateway between your DSL router and one of the telephone system's ISDN trunk line ports to VoIP-enable your ISDN system.

For a single VoIP line, all you need is the Auerswald Box, a free analog port on your PBX system, and an ATA (analog telephone adapter). VoIP connections will then go via the system's analog port. And the latest Auerswald

ISDN systems offer a particularly smart solution: with the integrated VoIP & GSM routing, calls can be routed via the analog ports, so you're not restricted by technology in your telephone behaviour. Auerswald PBX systems\* with integrated VoIP & GSM routing automatically select the best type of line for each call – landline, mobile phone, or internet.

We make the technology, so you can make calls.

\* COMpact 2104.2 USB, 2206 USB, 4410 USB, COMmader Basic

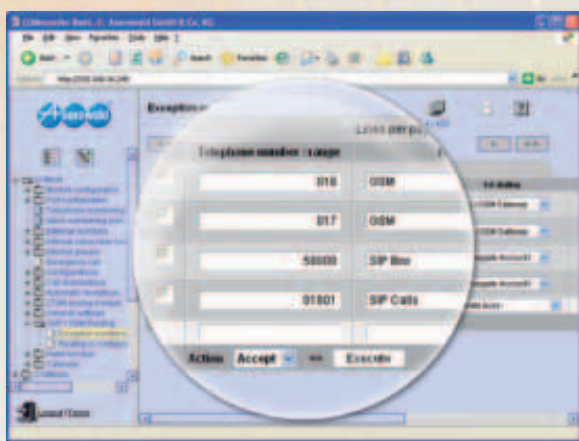
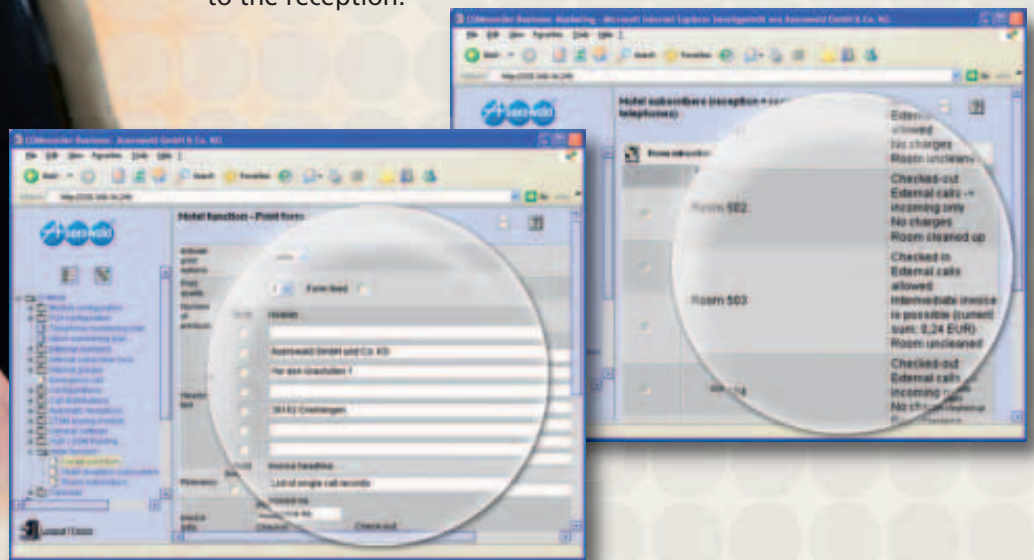
# Special Functions



## Hotel Function

With this additional function, Auerswald provides a quick and easy way for hotels (with up to 60 rooms) to manage their guests' telephone calls. You can activate the in-room phones from a central telephone (check in). When a guest leaves, you deactivate their phone, request the charges incurred, and print out an itemised bill for the guest (check out). You can use any analog or digital telephone as an in-room phone. These telephones are configured to support only a limited number of functions. This prevents guests from accidentally using features such as Call Forwarding.

Guests can use their in-room phone to call internal, external and emergency numbers, as well as setting a time for their automatic wake-up call. From the telephone at reception you can block all external calls from an in-room telephone, permitting only internal and emergency numbers. This still allows hotel staff to use the phone for communicating the room status (such as "cleaned") to the reception.

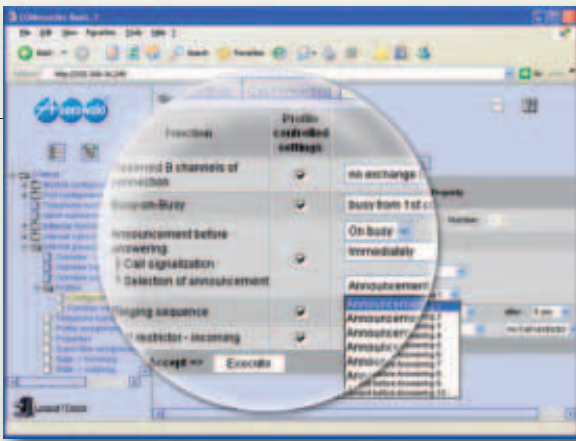


## VoIP & GSM Routing

This function opens up more ways of saving money, with internet and mobile telephony. Calls between two subscribers with the same VoIP provider or GSM network are normally cheaper or even free\*.

To automate this functionality simply save all VoIP or GSM numbers in a table of permitted numbers. For each table entry you can choose whether calls should be routed via VoIP or even via a connected GSM gateway. Numbers that aren't listed are automatically routed via the landline. If the numbers you have chosen are busy, you can set fallback numbers. By integrating these "gateways", you can also increase the number of external calls that can be made simultaneously.

\* Calls are only free if both subscribers use the same VoIP provider or a partner network. For details, please contact your VoIP provider.



## Announcement before Answering

To make your callers feel welcome, why not use the Announcement before Answering function! All calls are automatically answered and a greeting is played. Depending on your system's expansion level, the greeting can be played to up to 38 callers simultaneously (COMmander Business).

You can store your own Music on Hold and outgoing messages in WAVE file format, using either the COMtools software or the web interface. Depending on the system used up to ten different messages are available. You can also configure this function to play an announcement if the called extension is busy.



## Waiting Field

The integrated Waiting Field allows you to manage incoming calls from any number you have defined as a switchboard. Incoming calls are signalled on the COMfortel 1500/2500's function keys, so you can deal with them one by one. You can transfer individual calls to another extension, place them in a waiting loop if the extension is busy, keep them in the Central Waiting Field, or press the appropriate key to speak to the caller at any time. The size of the Waiting Field is determined by the number of trunk line channels available.

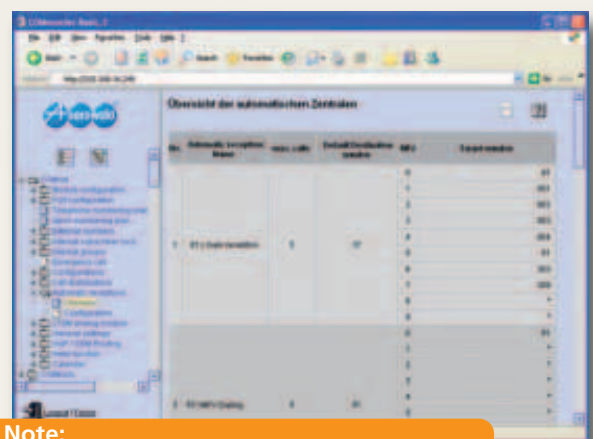
## Open Query

A call comes in and you do not know where the person is the caller wants to reach? An easy task with Auerswald systems. Simply transfer the call to one of the special numbers and inform your colleague via loudspeaker which number you have used to store the call. So he dials this number at any extension and is connected to the caller. And it is even easier with an Auerswald system phone: simply push the Xtension key with the illuminated LED!

## Auto Attendant

How about letting your callers decide themselves who they wish to speak to? You can define up to 10 different numbers that a caller can reach with DTMF dialling. The announcements informing the callers what options they have can be recorded via the telephone, or copied to the PBX system from your PC. A maximum of ten of these Auto Attendants can be applied in parallel or consecutively (cascaded) with the systems COMpact 5010/5020 VoIP and COMmander Basic.2/Business.

And Auerswald systems are even smarter: not only the ten standard options (0–9) can be used but as well multi-digit dialling (10–9999) is possible.



### Note:

This function is already included in our PBX system COMpact 4410 USB. With the COMpact 5010/5020 VoIP and COMmander Basic.2/Business systems, you will be able to activate it at a low price.

# Overview PBX systems

## COMpact

## COMmander®

2104.2 USB

2206 USB

4410 USB

5010 VoIP

5020 VoIP

Basic.2

Business

### Connection options

Max. number of PRI connections external	–	–	–	–	–	1 <sup>1</sup>	1 <sup>1</sup>
Max. number of ISDN S <sub>0</sub> ports external (DSS-1)	1	1	2 <sup>1</sup>	1	3 <sup>1</sup>	8 <sup>1</sup>	16 <sup>1</sup>
Connection type external ISDN S <sub>0</sub> ports	PTP / PTMP	PTP / PTMP	PTP / PTMP	PTP / PTMP	PTP / PTMP	PTP / PTMP	PTP / PTMP
VoIP with Auerswald Box / VoIP integration / VoIP & GSM routing	● / – / ●	● / – / ●	● / – / ●	– / ● / ●	– / ● / ●	– / ● / ●	– / ● / ●
VoIP speech codecs: G.711 / G.723.1 / G.726 / G.729A/E / iLBC	– / – / – / – / –	– / – / – / – / –	– / – / – / – / –	● / ● / ● / ● / ●	● / ● / ● / ● / ●	● / – / – / – / –	● / – / – / – / –
Max. number of VoIP channels / echo cancellation	– / –	– / –	– / –	4 <sup>1</sup> / ●	4 <sup>1</sup> / ●	2 / ●	2 / ●
Max. number of analog trunk line ports (POTS), tone/pulse dial	–	–	–	2 <sup>1</sup>	6 <sup>1</sup>	–	–
Max. number of ISDN S <sub>0</sub> ports internal (DSS-1)	–	1	3 <sup>1</sup>	2	8 <sup>1</sup>	24 <sup>1</sup>	56 <sup>1</sup>
Connection type internal ISDN S <sub>0</sub> ports	–	PTMP	PTMP	PTMP	PTMP	PTMP	PTMP
Max. number of U <sub>PI</sub> ports	–	–	–	2	8 <sup>1</sup>	32 <sup>1</sup>	72 <sup>1</sup>
Max. number of analog ports (symmetrical, pulse/tone dial)	4	6	10	6	10	32 <sup>1</sup>	64 <sup>1</sup>
Power failure mode (emergency phone)	–	● <sup>3</sup>	● <sup>3</sup>	● <sup>3</sup>	● <sup>3</sup>	● <sup>3</sup>	● <sup>3</sup>
Max. number of door phone interfaces (FTZ 123 D 12-0)	–	1 <sup>1</sup>	2 <sup>1</sup>	1 <sup>1</sup>	3 <sup>1</sup>	2 <sup>1</sup>	8 <sup>1</sup>
Max. number of door bell interfaces / alternatively: switching interfaces	– / –	2 <sup>1</sup> / 1 <sup>1</sup>	4 <sup>1</sup> / 2 <sup>1</sup>	2 <sup>1</sup> / 1 <sup>1</sup>	6 <sup>1</sup> / 3 <sup>1</sup>	4 <sup>1</sup> / 1 <sup>1</sup>	16 <sup>1</sup> / 4 <sup>1</sup>
Max. number of door openers / switching relays	– / –	1 <sup>1</sup> / 3 <sup>1</sup>	2 <sup>1</sup> / 6 <sup>1</sup>	1 <sup>1</sup> / 3 <sup>1</sup>	3 <sup>1</sup> / 9 <sup>1</sup>	2 <sup>1</sup> / 6 <sup>1</sup>	8 <sup>1</sup> / 24 <sup>1</sup>
Max. number of interfaces for additional bells	–	–	–	–	–	1 <sup>1</sup>	4 <sup>1</sup>
Support for Voicemail Center 461.2	–	●	●	●	●	●	●
Serial interface (V.24) for configuration / printer	– / –	● / ●	● / ●	– / –	– / –	– / ●	– / ●
USB printer connection (call data printout)	–	–	–	–	–	–	–
USB interface for PC / ISDN PC adapter function	● / ●	● / ●	● / ●	– / –	– / –	● / –	● / –
Ethernet port	–	–	–	●	●	●	●
Max. number of audio inputs (MoH) / outputs (announcement function)	– / –	1 / 1	1 / 1	1 <sup>1</sup> / 1 <sup>1</sup>	1 <sup>1</sup> / 3 <sup>1</sup>	1 <sup>1</sup> / 1 <sup>1</sup>	1 <sup>1</sup> / 4 <sup>1</sup>
System telephony with COMfortel 1500, 2500 / COMfortel DECT 900	– / –	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
System telephony with COMfort 1000, 1200, 2000 plus	–	●	●	●	●	●	●
<b>Trunk line features</b>							
Number of DDIs/MSNs for PTP / PTMP connection	30 <sup>2</sup> / 30 <sup>6</sup>	100 <sup>6</sup> / 100 <sup>6</sup>	100 <sup>2</sup> / 100 <sup>6</sup>	350 / 10	350 / 60	350 / 80	350 / 160
Call Transfer (HOLD) / Conference (3PTY)	● / ● <sup>4</sup>	● / ● <sup>4</sup>	● / ● <sup>4</sup>	● / ● <sup>4</sup>	● / ● <sup>4</sup>	● / ● <sup>4</sup>	● / ● <sup>4</sup>
Call Forwarding (CFB, CFNR, CFU)	●	●	●	●	●	●	●
DDI Call Forwarding (CD/PR)	–	–	–	●	●	●	●
Automatic Callback to busy subscriber (CCBS) / no reply (CCNR)	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Number presentation (CLIP) on ISDN / analog terminals	– / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Customer specific number presentation (CLIP no screening)	–	–	–	●	●	●	●
Call-by-call suppression of own number (CLIR)	●	●	●	●	●	●	●
Charge information AOCE / AOCD	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
X.31 on the internal S <sub>0</sub> port (X.25 in the D channel)	–	●	●	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>
Name display (CNIP using DISP/SUB)	●	●	●	●	●	●	●
<b>Security functions</b>							
Password protection, number of levels	4	4	4	4	4	4	4
Trunk line authorisations	6	6	6	6	6	6	6
Barred / allowed numbers (outgoing calls)	20 / 20	20 / 20	20 / 20	100 / 100	100 / 100	100 / 100	100 / 100
VIP / Robinson numbers (incoming calls)	20 / 10	20 / 10	20 / 10	100 / 100	100 / 100	100 / 100	100 / 100
Prioritised emergency numbers	●	●	●	●	●	●	●
Off-hook emergency dialling (e.g. baby call)	●	●	●	●	●	●	●
Room monitoring internal / external	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Alarm functions	–	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>
<b>Call data management (via PC software)</b>							
Call logging, number of records	3000	3000	3000	2000–6000 <sup>1</sup>	2000–6000 <sup>1</sup>	3000–9000 <sup>1</sup>	6000–18000 <sup>1</sup>
Separation of private and business calls	●	●	●	●	●	●	●
Call charges per CO line / extension	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Project-specific billing of calls	–	●	●	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>
Charge accounting per extension	●	●	●	●	●	●	●
Generation of charge pulses for analog ports (if AOCE/AOCD for ISDN is activated)	–	●	●	●	●	●	●
<b>Phone book / Short dial memory</b>							
Telephone directory central / per extension / with names	400 / 20 / ●	400 / 20 / ●	400 / 20 / ●	400 / – / ●	400 / – / ●	400 / – / ●	400 / – / ●
Name display on CNIP compatible terminals	●	●	●	●	●	●	●
Directory for emergency numbers with special rights	10	10	10	10	10	10	10
Short dial authorisation as extended exchange line authorisations	●	●	●	●	●	●	●
<b>Additional system features</b>							
Call Waiting / Busy-on-Busy	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Flexible numbering plan	● <sup>8</sup>	● <sup>8</sup>	● <sup>8</sup>	● <sup>9</sup>	● <sup>9</sup>	● <sup>9</sup>	● <sup>9</sup>
Waiting Field, switchboards / external calls	– / –	– / –	1 / 4	– / –	20 / 10	20 / 34	40 / 38
Open query	●	●	●	●	●	●	●
Auto Attendant (cascadeable)	–	–	1	10 <sup>1</sup>	10 <sup>1</sup>	10 <sup>1</sup>	10 <sup>1</sup>
Hotel Function (check-in/check-out)	–	–	●	–	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>
Definition of groups with MSN/DDI allocation	●	●	●	●	●	●	●
Group calls all / linear / incremental / rotating	● / – / – / –	● / – / – / –	● / – / – / –	● / ● / ● / ●	● / ● / ● / ●	● / ● / ● / ●	● / ● / ● / ●
Announcement before Answering	–	–	1	10 <sup>1</sup>	10 <sup>1</sup>	10 <sup>1</sup>	10 <sup>1</sup>
Automatic fax/modem switch	–	–	–	● <sup>1</sup>	● <sup>1</sup>	–	–
Do-not-disturb internal / external	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Line reservation	●	●	●	●	●	●	●
Direct line access / internal functions still possible	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Call pick-up (e.g. from answering machine)	●	●	●	●	●	●	●
Call Diversion internal / Follow me	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Boss/Secretary function	–	●	●	●	●	●	●
Call Forwarding, Call Transfer, Conference possible via 2nd B channel	●	●	●	●	●	●	●
Ring patterns to distinguish callers (using MSN/DDI, external)	8	8	8	8	8	8	8
Automatic Callback to busy subscriber, internal	●	●	●	●	●	●	●
Door terminal to exchange line calls (pharmacy function) internal / external	– / –	● / ● <sup>1</sup>	● / ● <sup>1</sup>	● / ● <sup>1</sup>	● / ● <sup>1</sup>	● / ● <sup>1</sup>	● / ● <sup>1</sup>
Manual / automatic switching of configurations (e.g. day/night)	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Max. number of configurations (profiles)	6	6	6	8	8	8	10 <sup>1</sup>
Music on Hold, number of internal melodies	7	7	● <sup>7</sup>	● <sup>7</sup>	● <sup>7</sup>	● <sup>7</sup>	● <sup>7</sup>
Support for UMS (via CAPi) / CTI (via TAPI)	● / ●	● / ● <sup>5</sup>	● / ● <sup>5</sup>	● / ● <sup>5</sup>	● / ● <sup>5</sup>	● / ● <sup>5</sup>	● / ● <sup>5</sup>
CTI (via LAN-TAPI)	–	–	–	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>
Call-Through (internal and external)	●	●	–	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>	● <sup>1</sup>
Least Cost Routing (max. number of providers): Soft-LCR	31	31	31	50 <sup>1</sup>	50 <sup>1</sup>	50 <sup>1+10</sup>	50 <sup>1+10</sup>
Support for landline SMS / separate call distribution for SMS	● / ●	● / ●	● / ●	● <sup>10</sup> / ● <sup>10</sup>	● <sup>10</sup> / ● <sup>10</sup>	● <sup>10</sup> / ● <sup>10</sup>	● <sup>10</sup> / ● <sup>10</sup>
<b>Installation and maintenance</b>							
Automatic detection of the dial mode at the analog extensions	●	●	●	●	●	●	●
Learning function for FLASH time detection at the analog extensions	●	●	●	●	●	●	●
Firmware update: PC / programming codes / key stroke / automatic	● / ● / ● / ●	● / ● / ● / ●	● / ● / ● / ●	● / – / – / –	● / – / – / –	● / – / – / –	● / – / – / –
Least Cost Routing setup and update via PC software	●	●	●	●	●	● <sup>10</sup>	● <sup>10</sup>
Remote readout/programming via public network / via ISDN PC card	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Config. via PC (V.24) / PC (USB) / ISDN PC card / Ethernet	– / ● / ● / –	● / ● / ● / –	● / ● / ● / –	– / – / ● / ●	– / – / ● / ●	– / ● / ● / ●	– / ● / ● / ●

# Overview Analog & System Telephones

	COMfort		COMfortel®			
	200	300	VoIP 250	1500	2500	DECT 900
<b>Connections/extensions</b>						
System connection	analog port	analog port	Ethernet 10/100 Base-T	internal S <sub>0</sub> /U <sub>0</sub> port	internal S <sub>0</sub> /U <sub>0</sub> port	internal S <sub>0</sub> port
USB interface for programming / TAPI / Internet	- / - / -	- / - / -	- / - / -	- / - / -	● / ● / ●	- / - / -
SMS via landline	-	-	-	● <sup>10</sup>	● <sup>10</sup>	●
Key extensions	-	-	max. 3 modules <sup>11</sup>	-	max. 3 modules <sup>11</sup>	-
Headset connection / Cordless headsets (DHSG)	- / -	● / -	● / ●	instead of handset	● / ●	● / -
Update of the firmware via ISDN / PC directly / interface of the PBX	- / - / -	- / - / -	- / ● / -	● / - / ●	● / ● / ●	- / - / -
Automatic update with copy function	-	-	-	●	●	-
External feeding / feeding via system connection	- / ●	● / -	- / ● (PoE)	- / ●	● <sup>11</sup> / ●	- / ●
Integrated answering machine	-	-	-	-	● <sup>10</sup>	-
<b>Display</b>						
Type	-	alphanumerical	graphical	graphical	graphical	graphical
Size	-	3 lines	128x64 pixel	128x32 pixel	128x64 pixel	102x65 pixel
Colours	-	monochrom	monochrom	monochrom	monochrom	monochrom
Illuminated	-	●	●	-	●	●
Menu languages	-	D GB F DK NL E PL S FIN N GR CZ SK TR	D GB	D GB F DK NL E GR I S CZ	D GB F DK NL E GR I S CZ	D GB F I
<b>Special functions COMfortel VoIP 250</b>						
VoIP speech codecs: G.711 / G.726 / G.729 / G.723.1 / GSM6.10 (full rate)	- / - / - / - / -	- / - / - / - / -	● / ● / ● / ● / ●	- / - / - / - / -	- / - / - / - / -	- / - / - / - / -
Max. number of VoIP channels / echo cancellation	- / -	- / -	2 / ●	- / -	- / -	- / -
<b>Special functions COMfortel DECT</b>						
Max. number of handsets COMfortel DECT	-	-	-	-	-	5 (recommended 3)
Max. number simultaneous connections	-	-	-	-	-	2
Max. number of COMfortel DECT Repeater.2	-	-	-	-	-	6
Automatic handover within the DECT range	-	-	-	-	-	●
Max. range of base and repeater	-	-	-	-	-	300 meter
Key lock / Key tones	- / -	- / -	- / -	- / -	- / -	● / ●
Max. talk / stand-by time of the handset	-	-	-	-	-	17 h / 147 h
GAP standard	-	-	-	-	-	●
<b>Fixed function keys</b>						
Cancel, disconnect	-	-	●	●	●	●
Hook (additional hook key)	-	-	●	●	●	-
Loudspeaker / hands-free	- / -	- / ●	● / ●	● / ●	● / ●	● / ●
Volume (+/-)	-	●	●	●	●	●
Microphone mute	●	●	●	●	●	●
Query key	●	●	●	●	●	●
Access to the phone directories in the phone / the PBX	● / -	● / -	● / -	● / ●	● / ●	● / ● <sup>12</sup>
Max. number of records in the phone	10	70	250	400	800	140 <sup>12</sup>
Vanity compatible keypad (2ABC, 3DEF, ...)	●	●	●	●	●	●
Redial list / number of entries	● / 1	● / 10	● / 30	● / 30	● / 30	● / 15
Power Dialling (automatic redialling)	-	-	-	●	●	●
<b>Softkeys, programmable multifunction keys</b>						
Number of softkeys	-	-	8	6	8	2
Number of multifunction keys / levels	-	3 / 1	15 / 2 <sup>11</sup>	15 / 2	15 / 2 <sup>11</sup>	10 / 1
Extension with key modules (max. number)	-	-	3 <sup>11</sup>	-	3 <sup>11</sup>	-
Max. number of multifunction keys per module / levels	-	-	30 / 2	-	30 / 2	-
Max. number of possible multifunction keys	-	3	105	15	105	10
Functions in the 2nd level (Macro / PBX / Number)	- / - / -	- / - / -	- / - / ●	● / ● / ●	● / ● / ●	- / - / -
LED per key	-	-	1 (multi coloured)	1 (multi coloured)	1 (multi coloured)	-
<b>Programmable function on the multifunction keys</b>						
Busy lamp field (extension/line keys)	-	-	● (SIP presence)	●	●	-
Speed dialling internal / external	- / -	● / ●	- / ●	● / ●	● / ●	● / ●
Call forwarding	● <sup>13</sup>	● <sup>13</sup>	●	●	●	●
Do-not-disturb	● <sup>13</sup>	● <sup>13</sup>	●	●	●	●
Selected MSN / S <sub>0</sub> access	● <sup>13</sup> / ● <sup>13</sup>	● <sup>13</sup> / ● <sup>13</sup>	- / -	● / ●	● / ●	● / ●
Selected SIP provider access	-	-	-	●	●	-
Configuration switching	● <sup>13</sup>	● <sup>13</sup>	-	●	●	●
Login/logout for groups	● <sup>13</sup>	● <sup>13</sup>	-	●	●	●
Terminal lock	-	-	●	●	●	-
Call pick-up	● <sup>13</sup>	● <sup>13</sup>	-	●	●	●
Switching of relays	● <sup>13</sup>	● <sup>13</sup>	-	●	●	●
Macro functions (complex sequences on a single keystroke)	-	-	-	●	●	-
<b>Caller list</b>						
Number of calls	-	61	30	30	30	30
Date, Time, Number	-	●	●	●	●	●
Name (if found during online search / if stored in the PBX phone directory)	- / -	- / ●	- / ●	● / ●	● / ●	- / ●
Call back function / transfer into the phone book	- / -	● / ●	● / ●	● / ●	● / ●	● / ●
<b>Configuration</b>						
Local configuration via menu / interface	- / -	● / -	● / ●	● / -	● / ●	● / -
Central configuration via PBX (V.24/USB/CAPI/Ethernet)	-	-	-	-	●	●
Configuration via Web interface	-	-	●	-	-	-
Remote configuration (public network)	-	-	-	●	●	●
<b>Call signalling</b>						
Optical with display illumination / optical signalling with LED	- / -	- / ●	● / ●	- / ●	● / ●	● / ●
Different for internal / external / door	● / ● / ●	● / ● / ●	- / - / -	● / ● / ●	● / ● / ●	● / ● / -
Different for subscribers / groups	- / -	- / -	- / -	● / ●	● / ●	- / -
Different for phone book entries	-	-	●	●	●	-
Different for VIP numbers	-	-	-	●	●	-
Different for appointments / wake-up / alarm	- / - / -	- / - / -	- / - / -	● / ● / ●	● / ● / ●	● / ● / -
Number of ring tones / individual changeable	3 / -	1 / -	10 / ●	8 / ●	16 / ●	15 / -
Name display out of the online / out of the system terminal phone book	- / -	- / ●	- / ●	● / ●	● / ●	● / ●

● Function available

- Function not available

<sup>1</sup> The possible expansion level and port configurations you can find in the product specifications

<sup>2</sup> When using a door station, 2 switching relays are not available

<sup>3</sup> Optional with ISDN-Autoswitch

<sup>4</sup> Available as extension feature

<sup>5</sup> In connection with COMfortel 2500, additional UMS and CTI clients are possible

<sup>6</sup> 100 MSNs/DDIs available in total for all external S<sub>0</sub> ports

<sup>7</sup> Music on Hold can be downloaded to the system via PC

<sup>8</sup> 2 or 3 digits, or mixed, 10-59 / 100-599

<sup>9</sup> 2-4 digits, or mixed, 10-9999

<sup>10</sup> Will become available later as an update

<sup>11</sup> Optional 3 additional Xtension30 modules with 30 two-level function keys each. COMfortel 2500: when using one or more COMfortel Xtension30 a power supply becomes necessary.

<sup>12</sup> COMPact 5010/5020 VoIP, Commander Basic2/Business: 140 entries in the phone book per handset, sync with central PBX phone book  
COMPact 2206/4410 USB: 80 entries in the phone book per handset, sync with central PBX phone book.

<sup>13</sup> Functions of the PBX are available by using activation digits

**Please note:** The full range of functions described here may only be available following professional installation and setup of the system and connection with a computer. We recommend you to contact an authorised dealer for information before attempting installation.

Some functions will only be available once your network provider has activated the appropriate services.

When using an Auerswald PBX system together with other manufacturers' terminals or systems, incompatibilities may occur, which may affect the use of certain features.

The features listed here refer to products for the German market. Product versions for export may be different.

Subject to change without prior notice

