Datasheet

COMpact 5500R

Fully modular, expandable VoIP device for 19" racks with up to 32 channels to service provider and 112 subscribers



- Up to 80 VoIP channels simultaneously, of which 32 can be configured for external use
- Up to 112 subscribers
- Up to 20 system telephony subscriber (with digital phones out of the COMfortel[®] series) or 20 analogue subscribers
- Second Ethernet interface (optional) for the separation of data and VoIP
- Softphone (optional) for Windows, iOS and Android

Your advantages in detail

No matter whether you're a promising new start-up or an established company that's planning to expand – this VoIP appliance can help keep all your options open. For the brand new COMpact 5500R, coping with increasing demand is fundamental. Thanks to its fully modular architecture, even its base configuration, designed for up to 12 VoIP subscribers, can also handle up to 112 subscribers (including externally located extensions) and also provide all the functions available in a "large" IP server.

Versatile yet easy to use: Analogue and ISDN connections can be retrofitted as integrated gateways, for example, for existing telephones. The specially de-

signed templates make configuring the VoIP trunks for all the major providers as easy as child's play. Even classic FXS and BRI connections can be retrofitted for each module as required.

The COMpact 5500R easily and securely meets the requirements of the home office and modern temporary workstations with optional soft clients for computers, tablets and smartphones. The cost-effective COMfortel SoftPhone 2 for voice and chat is available at the entry level. Those who need more extensive functions and more intensive integration into business processes will find the optimal UCC solution with PBX Call Assist.



COMpact 5500R

Features at a glance

SYSTEM FUNCTIONS

- System profiles (10 configurations max.) switchable by internal clock or manually by phone (internal and external)
- Bank holiday table for automatic switching of system profiles or wake-up calls
- Trunk line authorisations for reduction of costs and for multi-company operation
- Private trunk line access with user-related password, usable from all extensions
- · Automatic system-wide exchange line request
- Direct line access
- Call through for ISDN and VoIP trunk lines
- Waiting field for up to 20 simultaneous incoming calls^{1,2}
- Announcement before answering unconditional / on busy, 10 announcements can be stored
- Music on Hold with insertable announcement, loadable WAV file
- ISDN features such as CLIP, CW, AOC, CF, CCBS
- Least Cost Routing Soft-LCR for VolP, ISDN and POTS
- Emergency calls, 10 numbers with special rights and priority
- Call barring / exception lists, 10 each for incoming and outgoing calls
- Protection against attacks with blocking, black lists, monitoring
- · Call data management with max. 18,000 records
- Project assignment of calls
- · Call data printout (hotel) via network (PCL3)
- Group caller lists 1,2
- Group functions with intelligent ringing schemes (ACD feature for Call Centres)
- Flexible rework time for Call Centres
- Parallel call, simultaneous calling of a 2nd target and priority
- Busy-on-busy for internal and external calls, dynamical applicable for logged-in Call Agents
- Call brokering, three-party conference internal / via exchange line / via 2nd call channel
- Open query / up to 10 on-hold positions
- Pickup specific/global
- Pickup with pre-check¹
- Boss-secretary function^{1,2}
- · Call diversion, follow me internal, cascadable
- Door terminal to exchange line calls (pharmacy function)

- Voicemail and fax functions
- Call take-over (e.g. from integrated answering machine)
- Speaker announcement (Intercom) to system telephones (single user and groups)
- Software interfaces
- Supporting CTI basic functions (the most important phone functions like initiating a call, accepting a call, ending a call, holding a call, toggling calls, call transfer, starting a three party conference, pickup)³

SIP CONVENIENCE FEATURES FOR STANDARD SIP PHONES⁴

- SIP-BLF, Busy Lamp Field acc. to RFC 4235
- Pickup pre-check⁵
- SIP-MWI (Message Waiting Indication), monitoring of the central voicemail and fax boxes acc. to RFC 3842
- SIP text messages acc. to RFC 3428
- Auto provisioning and status LEDs⁶

CENTRAL ADDRESS BOOKS

- 2,000 contacts
- Separate address books for departments and multicompany operation
- Comfortable operation via COMfortel system phones
- Security access levels for administrator and user
- Address book provisioning via LDAP
- Usage of Google Contacts
- Import of VCF and CSV files

BUILDING AND HOME AUTOMATION

- Max. 24 actuators, e.g. a/b Switching Modules or via http with IP switching relays
- KNX/EIB integration via IP, e.g. with GIRA HomeServer
- Time or key controlled operation of heating systems, aircondition lighting or blinds^{1,2}
- Full integration of VoIP and analogue door intercom systems
- Support for IP video intercom systems¹

VOIP TELEPHONY

- 8 VoIP channels (external/internal) included, expansion to 80 VoIP channels possible⁴
- Dynamic internal/external VolP channels
- Fax over IP external (T.38 acc. ITU-T)



- Excellent sound quality due to optimised echo cancellation and wideband audio with G.722⁷
- Integration of external extensions (information on the location of the telephone is taken into account in an emergency call) and mobile clients
- MSNs in SIP-Trunk simultaneously
- Call forwarding on busy (CFB), no reply (CFNR), unconditional (CFU) at carrier trunk, configuration dependent
- Encrypted signalling (SIPS) and data transmission (SRTP)
- Transfer of customer-specific calling number information with outgoing calls (CLIP no screening)
- Individual gateways for each provider

VOICEMAIL AND FAX

- 1 voicemail channel and 1 voicemail box included
- Expansion to up to 8 voicemail and fax channels with up to 60 boxes each⁴
- Fax sending via the network (Windows 7/8/10/11)
- Storage of the voice and fax messages on USB memory (not included)
- Recording capacity (per 1 GByte storage): approx. 8.5 hours voice messages incl. announcements or approx. 3,500 fax pages
- Call acceptance and individual announcements depending on calling number, time and call type
- Comfortable operation via corded COMfortel system phones
- Substitute function
- Message and fax forwarding via e-mail
- Remote access of the voicemail boxes incl. voice guidance
- Active and passive fax switch at analogue trunk lines

COMFORTEL SOFTPHONE 28

- Softclient for the base functionality SIP telefony and messaging
- Secure and simple PBX connection from anywhere via Auerswald cloud service
- Softphone for Windows, macOS, iOS and Android

UCC FUNCTIONS⁴

- Softphone-functions for Windows, Android und iOS
- Call setup and ending via the PC, incl. Outlook plug-in
- Presence management with automatic status detection
- Alignment with MS Teams
- Instant messaging for a better sharing of information
- Contact data for local users and out of external data bases
- Screen sharing for convinient cooperation

- "Federation" as networking concept between external sites and companies
- Platform independent (Windows, macOS, iOS, Android)

SUPPLEMENTARY SMARTPHONE APPS

- PBX Manager with switching of call forwardings log-in/out in groups, retrieving of messages
- COMfortel Mobile Business seamless integration in iOS and Android, signalling of the business number, full flexibility, always reachable⁷

SOFTWARE INTERFACES

- Recalling call data via SFTP
- LAN TAPI (4 clients in scope of delivery)⁴
- Online name search (reverse search), adaptable
- PBX Control API, e.g. retrieve caller lists, call forwarding ON/OFF, configuration switching, sending of fax/voicemail, switching relays, alarm status (start, acknowledgment, timeout), hotel (room status, call list, wake-up call)

INSTALLATION AND MAINTENANCE

- Note: System activation by specialised dealer necessary (costs possible)
- Administration via web interface, secure access via https
- System access local via Ethernet and remote via Internet
- System software update via local or remote PC upload
- Central configuration of IP telephones (security by using certificates) ^{1,9}
- Auto provisioning for telephones of other brands^{6,7}
- Easy configuration with COMfortel IP Editor
- Selectable authorisation levels, password protected
- IPv6 support
- Second Ethernet port for a separate netzwork with own IP address range (with optional COMpact NET Module)

UNLOCKABLE OPTIONS

- System activation (necessary for operation of the system)
- Expansion with 8 VoIP channels up to 80 channels (a maximum of 80 VoIP channels possible in the system)
- Expansion to 20, 40 or 60 voicemail and fax boxes
- Auto Attendant
- Hotel function²
- LAN-TAPI (for all subscribers)
- PBX Call Assist
- COMfortel SoftPhone
- SIP comfort package brand plus included auto provisioning for standard SIP phones⁶



- Extension to configure up to 32 external channels to the service provider (fixed or dynamic) 10
- Expansion of the on-hold positions from 10 to 30¹¹
- · Comfort package D series (call flow display and intercom call) 11

COMPATIBLE PRODUCTS

- 90131 / COMpact 2BRI Module
- 90132 / COMpact 2FXO Module
- 90133 / COMpact 4FXS Module
- 90333 / COMpact NET Module
- 90698 / a/b-Audiobox
- 94xxx / PBX Call Assist 5

TECHNICAL SPECIFICATIONS

Trunk lines 12

- VoIP channels (SIP acc. RFC 3261), point-to-multipoint/ point-to-point connection (SIP trunking): 0 - 8 min. | 32 max. 13
- S₀ ports, point-to-multipoint/point-to-point connection (PTMP/PTP, Euro-ISDN, DSS-1), switchable to internal S₀/ U_{P0}: 0 min. | 3 max.
- Analogue trunk line (tone dialling, CLIP capable): 0 min. | 6 max.
- VoIP codecs trunk line: G.711, G.722, G.726, G.729 and **iLBC**

Subscriber ports 12

- VoIP subscribers: 0 min. | 112 max.
- VoIP channels (SIP acc. RFC 3261): 0 8 min. | 80 max.
- VoIP codecs internal: G.711, G.722, G.726, G.729, iLBC
- Switchable S_0/U_{P0} ports , point-to-multipoint connection (PTMP, Euro-ISDN, DSS-1): 0 min. | 10 max.
- Range of the internal S_0/U_{P0} ports: approx. 150 m / 1,000 m at Ø 0.6 mm
- Analogue ports, symmetrical, pulse/tone dialling, CLIP/ CNIP capable: 0 min. | 20 max.

• Range of the analogue ports: $2 \times 50 \Omega$, approx. 790 m at Ø 0.6 mm

Voicemail and fax system¹²

- · Voicemail channels: 1 min. | 8 max.
- Fax channels: 0 min. | 8 max.
- Voicemail boxes / fax boxes: 1 / 0 min. | 60 / 60 max.
- Fax standard: T.30/T.38 acc. to ITU-T
- Active and passive fax switch for analogue trunks: yes

Door and relay connections

- Door intercom systems analogue (a/b) or VoIP (SIP): 8
- Door bell inputs: depending on the analogue/VoIP door intercom system
- Door opener relay: depending on the analogue/VoIP door intercom system
- · Switching relays (door opener, staircase lighting, IP switch relay, a/b Switching Modul): 24

Additional connections 12

- Ethernet ports 10/100 Base-T (10/100 MBit/s, twisted pair): 1 min. | 2 max.
- USB host V2.0 for printer and memory connection: 1
- Analogue audio output for announcements (e.g. a/b Audiobox): 4
- Module slots: 5+1

Technical data

- Operating voltage: 230 V ±10 %, 50 Hz
- Power consumption: 5 W min. | 65 W max.
- Housing: plastic, metal angles for 19" rack mounting
- Dimensions (w x h x d): 325 mm x 88 mm x 240 mm
- Weight (w/o modules): approx. 1,700 g
- Compliance: CE
- Supported operating systems: Windows 7/8/10, macOS, Linux

DELIVERY

- Base unit
- Ethernet cable
- Operating manual

- ¹ With COMfortel 1400 IP / 2600 IP / 3600 IP
- ² With COMfortel 1400 / 1600 / 2600
- ³ Firmware version 7.6B or higher
- ⁴ Paid activation required
- ⁵ Is only supported for the telephone models D-400/D-600 and D-210/D-200 in operation with an extension.
- ⁶ Auto-provisioning currently for phones made by Yealink and Snom
- ⁷ With system firmware 7.4
- 8 Firmware version 8.6C or higher
- 9 With COMfortel D-100 / D-200
- ¹⁰ With system firmware 7.8A
- ¹¹ With system firmware 8.2B or higher
- ¹² Possibly depending on the configuration of the telephone system
- ¹³ VoIP channels can be configured individually internally/externally or as voicemail/fax channels

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