

## COMmander® 6000R

Full modular communication server (ISDN, VoIP) for seamless VoIP integration with up to 38 trunk lines, up to 112 subscribers and 5 module slots, in a 19" housing for rack mounting.

- Up to 38 exchange calls simultaneously via ISDN and/or VoIP
- Up to 112 VoIP subscribers
- Up to 64 ISDN and 32 analogue subscribers
- Up to 64 VoIP channels simultaneously, of which 38 can be configured for external use (internet telephony)
- System telephony with digital VoIP and ISDN devices from the COMfortel series
- Remote extensions with COMfortel 1400 IP, 2600 IP and 3600 IP, as well as with mobile VoIP clients and soft phones
- Internal ISDN ports for 2-wire and 4-wire technology (U<sub>P0</sub> and S<sub>0</sub>)
- Unified Messaging – central voicemail and fax system with up to 16 channels for 120 subscribers and groups max.
- Increased productivity due to supplementary smartphone apps
- Interfaces (APIs) for connecting 3<sup>rd</sup> party software, e.g. ESTOS ProCall and proprietary software
- Auto attendant, 10 destination number in parallel and sequential
- Address books for departments and multi-company operations
- Hotel function, check-in/check-out and invoice printing without PC
- Door and switching functions
- 19" housing with 5 module slots, expandable up to 15



Even if you want to start with a small system at first – our COMmander 6000R with its fully modular design makes a perfect investment in the future. It is suitable for 19" racks, offers 38 exchange channels and up to 112 internal ports. To connect with the public telephone network, you may choose between VoIP exchange channels, ISDN basic lines and a primary rate interface, while internal participants share the VoIP, ISDN and analogue connections.

Its full potential, however, lies idle until your demands increase and your communication requirements grow. Are you hoping to enjoy uninterrupted communication via wireless DECT system phones, or do you have a centralized voicemail and fax system with Unified Messaging in mind?

No problem – simply plug the relevant extension into one of the COMmander 6000R's five open slots. The number of slots can even be extended to 15 if required. You can also tap the advantages of the "Cloud" for your company.

This high-performance server can easily be integrated into your local network which ensures that all your subsidiaries and home offices are optimally connected to the system. Integrated web applications also enable you to configure and maintain your system from wherever you happen to be! The COMmander 6000R is designed to be integrated in structured cable networks. Connections are easily accessible via patch panels with RJ-45 jacks, and retrofitting the system with extension modules is done directly on the front panel. As you see, this system can be designed to meet your requirements perfectly – from the smallest expansion stage up to the full version.

## Features

### System features

- Trunk line authorisations for the reduction of costs
- System profiles (10 configurations max.) switchable by internal clock or by phone from internal and external
- Door terminal to exchange line calls (pharmacy function)
- Automatic system-wide exchange line request
- Busy-on-busy for internal and external calls, dynamically depending on logged-in call agents
- Call through for ISDN and VoIP trunk lines
- Boss/secretary function<sup>1,2</sup>
- Direct line access
- Speaker announcement (Intercom) to corded system telephones (single and groups)
- Bank holiday table for automatic switching of system profiles or wake-up calls
- Call data management with max. 18,000 records
- Call data printout (hotel) via network (PCL3)
- Call take-over (e.g. from integrated answering machine)
- Group caller lists<sup>3</sup>
- Group functions with intelligent ringing schemes (ACD functionality for call centres)
- ISDN features like CLIP, CW, AOC, CF, CCBS
- Least Cost Routing Soft-LCR for VoIP, ISDN and analogue
- Call brokering, three-party conference internal / via exchange line / via 2<sup>nd</sup> call channel
- 10 emergency numbers with special rights and prioritisation
- Open query
- Parallel call, simultaneous calling of a 2<sup>nd</sup> target
- Pick-up, specific (with pre-check<sup>1</sup>) / global pick-up
- Call diversion, follow me internal, cascable
- Protection against attacks with blocking, black lists, monitoring
- Software interfaces
- Call barring / exception lists, 10 each for incoming and outgoing calls
- Announcement before answering unconditional / on busy, 10 announcements can be stored
- Flexible rework time for call centres
- Voicemail and fax functions
- Waiting field<sup>1,2</sup> for up to 38 simultaneous incoming calls
- Music on Hold with insertable announcement, loadable WAV file

### SIP comfort functions for standard SIP phones<sup>4</sup>

- SIP-BLF, Busy Lamp Field acc. to RFC 4235
- Pick-up pre-check
- SIP-MWI (Message Waiting Indication), monitoring of the central voicemail / fax boxes acc. to RFC 3842
- SIP text messages acc. to RFC 3428
- Auto provisioning and status LEDs<sup>6</sup>

### Central address books

- 2,000 contacts incl. photo, addresses and numbers
- Separate address books for departments and multi-company 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

### Facility 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, air-condition lighting or blinds<sup>1,2</sup>
- Full integration of VoIP and analogue door intercom systems
- Support for IP video intercom systems<sup>1</sup>

### VoIP (internet telephony / internal IP telephony)

- 2 VoIP channels (external / internal) included, expansion to 64 VoIP channels possible<sup>4</sup>
- Dynamic internal/external VoIP channels
- Excellent sound quality due to optimised echo cancellation and wide-band audio with G.722
- Fax over IP external (T.38 acc. ITU-T) with COMmander 8/16VoIP-R-module
- Remote extensions and mobile VoIP client integration
- Call forwarding on busy (CFB), no reply (CFNR), unconditional (CFU) at carrier trunk, configuration dependent
- MSNs in SIP-Trunk simultaneously
- Encoded signalling (SIPS) and data transmission (SRTP) with 8/16VoIP R module(s)
- Transfer of customer-specific calling number information with outgoing calls (CLIP no screening)

### Voicemail and fax functions

- 2 voicemail channels and 4 voicemail boxes included, expansion to up to 16 voicemail and fax channels with up to 120 boxes each<sup>4</sup>
- Fax sending via the network (Windows 7,8,10 / Mac OS.X)<sup>4</sup>
- Recording capacity (integrated storage 4 GByte):
  - approx. 120 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

### UCC functions with PBX Call Assist<sup>4</sup>

- Softphone functionality for Windows, Android and iOS
- Call setup and ending via PC, incl. Outlook plug-in
- Presence management with automatic status detection
- Instant messaging for fast information exchange
- Contact data for local user and out of external databases
- Screen sharing for convenient cooperation
- „Federation" as networking concept between external sites and companies
- Platform independent (Windows, Mac, iOS, Android)

### Supplementary smartphone apps

- COMfortel Mobile Business<sup>5</sup>
  - Seamless integration in iOS and Android
  - Signaling of the business number
  - Full flexibility, always reachable
- PBX Manager with
  - Switching of call forwardings
  - Log-in/-out in groups
  - Retrieving of messages

### Software interfaces (APIs)

- Recalling call data via SFTP
- LAN TAPI<sup>4</sup> (8 clients in scope of delivery)
- Online name search (reverse search), adaptable
- API for 3<sup>rd</sup> party software, e.g. retrieving of 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 specialized Auerswald 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<sup>1</sup>)
- Auto provisioning for phones of other brands<sup>5,6</sup>
- Simple configuration with COMfortel IP Editor

- Selectable authorisation levels, password protected
- IPv6 support

#### Activation options<sup>4</sup>

- 8 additional VoIP channels for 8/16VoIP-R module(s), up to 64 VoIP channels possible
- 8 additional voicemail/fax channels, 40 additional voicemail and 40 additional fax boxes for the VMF-R module
- Auto Attendant
- Call through connections (all lines), 4 simultaneous connections included
- Call data records (up to 18,000), 6,000 included
- Hotel function<sup>2</sup>
- LAN TAPI (up to 112 subscribers), 8 included
- Least Cost Routing Soft-LCR (up to 112 subscribers), 8 incl.
- PBX Call Assist
- Project assignment of calls
- SIP comfort package brand plus incl. auto-provisioning<sup>6</sup> for standard SIP phones
- System activation (necessary for the operation of the system)

1 With COMfortel 1400 IP / 2600 IP / 3600 IP

2 With COMfortel 1400 / 1600 / 2600

3 With corded COMfortel system telephones

4 Can be activated with costs or extension modules necessary

5 With system firmware 7.4 (Q2/18)

6 Auto-provisioning currently for phones made by Yealink and Snom

## Technical data

### COMmander 6000R

- **Operation voltage:** 230 V ±10 %, 50 Hz
- **Power consumption\*:** 7.1 W min., 70 W max. (230 V max.)\*\*
- **Exchange lines\*:** 1 S<sub>2M</sub> primary rate connection (PRI) max., point-to-point connection (PTP, Euro-ISDN, DSS-1); 16 S<sub>0</sub> ports max., point-to-multipoint/point-to-point connection (PTMP/PTP, Euro-ISDN, DSS-1); 38 VoIP channels (SIP acc. RFC 3261), point-to-multipoint/point-to-point connection
- **VoIP Codecs trunk line\*:** G.711 (optional: G.723.1, G.726, G.729, iLBC)
- **Analogue subscriber ports\*:** 32(64)\*\* symmetrical max., pulse/tone dialling, CLIP/CNIP capable
- **Range of the analogue ports:** 2 x 50 Ω, approx. 790 m at Ø 0.6 mm
- **Internal S<sub>0</sub> ports\*:** 32(56)\*\* S<sub>0</sub> ports max., point-to-multipoint connection (PTMP, Euro-ISDN, DSS-1)
- **Range of the internal S<sub>0</sub> ports:** approx. 150 m
- **Internal U<sub>P0</sub> ports\*:** 32(72)\*\* U<sub>P0</sub> ports max., point-to-multipoint connection (PTMP, Euro-ISDN, DSS-1)
- **Range of the internal U<sub>P0</sub> ports:** approx. 1,000 m at Ø 0.6 mm
- **VoIP subscribers\*:** up to 112 subscribers
- **VoIP channels internal\*:** 2-64 VoIP channels (SIP acc. to RFC 3261)
- **VoIP codecs internal\*:** G.711 (optional: G.723.1, G.726, G.729, iLBC)
- **Voicemail and fax channels\*:** 16 channels max., each 120 voicemail and fax boxes
- **Fax standard\*:** T.30/T.38 acc. ITU-T
- **Door intercom ports\*:** 8 max. acc. FTZ 123 D12-0
- **Maximum load door opener relay:** 30 V, 1 A max.
- **Audio output ports\*:** up to 4 connections for announcement systems via analogue ports (e.g. using the a/b Audiobox)
- **PC connection:** 1 Ethernet port 10/100 Base-T (10/100 MBit/s, twisted pair)
- **USB host V2.0** for printer or voicemail memory
- **Module slots:** 5(15)\*\* slots for COMmander 8/16VoIP R-module, PRI R-module, 4S<sub>0</sub> R-module, 8S<sub>0</sub> R-module, 8U<sub>P0</sub> R-module, 8a/b R-module, VMF R-module und 2TSM R-module
- **Housing:** closed 19" rack-mounting type casing, 6 HU (height units)
- **Dimensions (w x h x d):** 483 mm x 227 mm x 245 mm (approx. 300 mm incl. handholds and cable inserting spout)
- **Weight (w/o modules):** approx. 4,600 g (5,400 g)\*\*

- **Safety:** CE

\* Depending on the setup level of the system

\*\* Valid for COMmander 6000RX resp. COMmander 6000R incl. add-on set COMmander 6000R Xtension.

## Scope of delivery

- COMmander® 6000R
- Power supply cable
- Ethernet connection cable

## Ordering information

- **Product designation:** COMmander® 6000R
- **Article number:** 90671

## Matching modules

### COMmander 6000R Xtension

- **Specification:** Expansion set with 10 additional module slots
- **Scope of delivery:** Expansion power supply, connection cable set, expansion PCB, blind plate, module guard rails, fixing material, installation instruction
- **Product name:** COMmander® 6000R Xtension
- **Article number:** 90673

### COMmander 8/16VoIP-R module

- **Specification:** Expansion with 8 VoIP channels, usable internal/external, with release expandable to 16 channels
- **Connections:** 2 x RJ45
- **Max. quant.:** 4 per system
- **Article number:** 90675

### COMmander S2W-R module

- **Specification:** Expansion with 1 external PRI port with up to 30 B channels
- **Connections:** RJ45 / terminal blocks
- **Max. quant.:** 1 per system
- **Article number:** 90674

### COMmander 4S<sub>0</sub>-R module

- **Specification:** Expansion with 4 S<sub>0</sub> ports, usable internal/external
- **Connections:** 8 x RJ45
- **Max. quant.:** 5 per system
- **Article number:** 90677

### COMmander 8S<sub>0</sub>-R module

- **Specification:** Expansion with 8 S<sub>0</sub> ports, thereof 4 usable internal/external and 4 internal
- **Connections:** 16 x RJ45
- **Max. quant.:** 4 per system
- **Article number:** 90678

### COMmander 8U<sub>P0</sub>-R module

- **Specification:** Expansion with 8 internal U<sub>P0</sub> ports for system telephones
- **Connections:** 8 x RJ45
- **Max. quant.:** 4 per system
- **Article number:** 90679

### COMmander 8a/b-R module

- **Specification:** Expansion with 8 internal analogue ports
- **Connections:** 8 x RJ45
- **Max. quant.:** 4 per system
- **Article number:** 90682

**COMmander VMF-R module**

- **Specification:** Central 8-channel voicemail and fax system with 80 boxes each. Expansion to 16 channels / 120 boxes with release code.
- **Connections:** 2 x RJ45
- **Max. quant.:** 1 per system
- **Article number:** 90680

**COMmander 2TSM-R module**

- **Specification:** Door/switching/music module for 2 door stations, up to 6 switching relays and audio input/output
- **Connections:** terminal blocks, 2 x cinch socket
- **Max. quant.:** 4 per system
- **Article number:** 90681

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