

Datasheet

# COMmander® 6000R



Fully modular ISDN/VoIP communication server for 19" racks; up to 38 exchange line channels and 112 subscribers, 5 module slots



- 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

## Your advantages in detail

Configure the COMmander 6000R communication server to suit your specific requirements, from the lowest extension level to a fully extended system. Configurable for 38 exchange line channels and up to 64 internal ports. Use VoIP exchange line channels, ISDN base connections and a primary multiplex interface to connect to the public telephone network, while internal subscribers share the VoIP, ISDN and analogue connections.

Do you want to start with a small-scale system but are planning to set up comprehensive coverage using

cordless DECT system phones or a central voice mail and fax system with unified messaging? Simply plug the extra modules into the 5 available expansion slots, which can be extended to 15 slots as required. Thanks to the Cloud, you can also set up external private branch exchanges, for use in subsidiaries or home offices, quickly and easily.

The COMmander 6000R is ideal for integration in structured cabled networks. Patch panels with RJ-45 sockets give easy access to the connections. Expansion modules can be plugged in directly on the front panel.

do you speak  
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# 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 38 simultaneous incoming calls<sup>1,2</sup>
- 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 VoIP, 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<sup>1,2</sup>
- 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-check<sup>1</sup>
- Boss-secretary function<sup>1,2</sup>
- 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)<sup>3</sup>

## SIP CONVENIENCE FEATURES FOR STANDARD SIP PHONES<sup>4</sup>

- SIP-BLF, Busy Lamp Field acc. to RFC 4235
- Pickup pre-check<sup>5</sup>
- 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 LEDs<sup>6</sup>

## CENTRAL ADDRESS BOOKS

- 2,000 contacts
- 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

## 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<sup>1,2</sup>
- Full integration of VoIP and analogue door intercom systems
- Support for IP video intercom systems<sup>1</sup>

## VOIP TELEPHONY

- 2 VoIP channels (external/internal) included, expansion to 64 VoIP channels possible
- Dynamic internal/external VoIP channels
- Fax over IP external (T.38 acc. ITU-T)
- High audio quality due to Echo Cancellation

- 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) with 8/16VoIP (R-)Module(s)
- Transfer of customer-specific calling number information with outgoing calls (CLIP no screening)

### VOICEMAIL AND FAX

- 1 voicemail channel and 4 voicemail boxes included, expansion to up to 16 voicemail and fax channels with up to 120 boxes each
- Fax sending via the network (Windows 7/8/10)
- Recording capacity (at 4 GByte storage): 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

- Softphone-functions for Windows, Android und iOS
- Call setup and ending via the PC, incl. Outlook plug-in
- Presence management with automatic status detection
- 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, Mac, 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 reachable<sup>7</sup>

### SOFTWARE INTERFACES

- Recalling call data via SFTP
- LAN TAPI (8 clients in scope of delivery), paid activation is required for more than 8 clients

- Online name search (reverse search), adaptable
- PBX Control API, e.g. retrieve caller lists, call forwarding ON/OFF, configuration switching, sending of fax/voice-mail, 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)<sup>1,8</sup>
- Auto provisioning for telephones of other brands<sup>6,7</sup>
- Easy configuration with COMfortel IP Editor
- Selectable authorisation levels, password protected
- IPv6 support

### UNLOCKABLE OPTIONS

- System activation (necessary for operation of the system)
- 8 additional VoIP channels for 8/16VoIP (R-)Modules, 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 (for 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 included auto provisioning for standard SIP phones<sup>6</sup>
- Expansion of the on-hold positions from 10 to 30<sup>9</sup>
- Comfort package D series (call flow display and inter-com call)<sup>9</sup>

### COMPATIBLE PRODUCTS

- 16674 / COMmander® S2M-R Module
- 16678 / COMmander® 8S0-R Module
- 16677 / COMmander® 4S0-R Module
- 16679 / COMmander® 8UP0-R Module

- 16782 / COMmander® 8a/b-R Module
- 16781 / COMmander® 2TSM-R Module
- 16675 / COMmander® 8/16VoIP-R Module
- 16680 / COMmander® VMF-R Module
- 16673 / COMmander® 6000R Xtension
- 90698 / a/b-Audiobox
- 90436 / UP0/S0 Adapter
- 94xxx / PBX Call Assist 5

## TECHNICAL SPECIFICATIONS

### Trunk lines<sup>10</sup>

- PRI port, point-to-point connection (PTP, Euro-ISDN, DSS-1): 1 max.
- S<sub>0</sub> ports, point-to-multipoint/point-to-point connection (PTMP/PTP, Euro-ISDN, DSS-1): 16 max.
- VoIP channels (SIP acc. RFC 3261), point-to-multipoint/point-to-point connection (SIP trunking): 38 max.<sup>11</sup>
- VoIP codecs trunk line: G.711 (optional: G.723.1, G.726, G.729, iLBC)

### Subscriber ports<sup>10</sup>

- S<sub>0</sub> ports, point-to-multipoint connection (PTMP, Euro-ISDN, DSS-1): 32 (56) max.<sup>12</sup>
- Range of the internal S<sub>0</sub> ports: approx. 150 m at Ø 0.6 mm
- U<sub>p0</sub> ports, point-to-multipoint connection (PTMP, Euro-ISDN, DSS-1): 32 (72) max.<sup>12</sup>
- Range of the internal U<sub>p0</sub> ports: approx. 1,000 m at Ø 0.6 mm
- Analogue ports, symmetrical, pulse/tone dialling, CLIP/CNIP capable: 32 (64) max.<sup>12</sup>
- Range of the analogue ports: 2 x 50 Ω, approx. 790 m at Ø 0.6 mm
- VoIP subscribers: 112 max.
- VoIP channels (SIP acc. RFC 3261): 64 max.<sup>11</sup>
- VoIP codecs internal: G.711 (optional: G.723.1, G.726, G.729, iLBC)

### Voicemail and fax system<sup>10</sup>

- Voicemail and fax channels: 16 max.
- Voicemail and fax boxes: 120 max. each
- Fax standard: T.30/T.38 acc. to ITU-T

### Door and relay connections<sup>10</sup>

- Door connections acc. to FTZ 123 D12-0: 8 max.
- Door bell inputs: 16 max.
- Door opener relay: 8 max.
- Switching relays: 24 max., thereof 1 - 2 per door station
- Maximum load door opener relay: 30 V AC, 1 A max.

### Additional connections<sup>10</sup>

- Ethernet port 10/100 Base-T (10/100 MBit/s, twisted pair): 1
- USB host V2.0 for printer and memory connection: 1
- Audio output for announcements: 4 max.
- Modul slots: 5 (15)<sup>12</sup>

### Technical data

- Operating voltage: 230 V ±10 %, 50 Hz
- Power consumption: 7.1 W min., 75 W max. (230 W max.)<sup>12</sup>
- 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)<sup>12</sup>
- Compliance: CE
- Supported operating systems: Windows 7/8/10, macOS, Linux

### DELIVERY

- Basic unit
- Ethernet cable
- Patch cable
- USB cable
- Mains cable
- Installation Instructions and Setup Guide

<sup>1</sup> With COMfortel 1400 IP / 2600 IP / 3600 IP

<sup>2</sup> With COMfortel 1400 / 1600 / 2600

<sup>3</sup> Firmware version 7.6B or higher

<sup>4</sup> Paid activation required

<sup>5</sup> Is only supported for the telephone models D-400/D-600 and D-210/D-200 in operation with an extension.

<sup>6</sup> Auto-provisioning currently for phones made by Yealink and Snom

<sup>7</sup> With system firmware 7.4

<sup>8</sup> With COMfortel D-100 / D-200

<sup>9</sup> With system firmware 8.2B or higher

<sup>10</sup> Possibly depending on the configuration of the telephone system

<sup>11</sup> VoIP channels can be configured individually internally/externally or as voicemail/fax channels

<sup>12</sup> Values in brackets are referring to COMmander 6000R incl. expansion set COMmander 6000R Xtension

## ORDERING INFORMATION

Designation: COMmander® 6000R

Article number: 16671

EAN Code: 4019377166710