ALCATEL-LUCENT OMNIPCX™ OFFICE RICH COMMUNICATION EDITION
SMALL AND MEDIUM BUSINESSES

To compete and succeed in today's marketplace, small- and medium-sized businesses (SMBs) need enterprise-class products. With increased security, mobility, and an enriched user experience – all at a lower cost – the Alcatel-Lucent OpenTouch™ Suite for SMB helps businesses grow.

OmniPCX Office RCE Compact Edition

The cornerstone of Alcatel-Lucent's SMB offering is the OmniPCX Office Rich Communication Edition (RCE). It offers an all-in-one, end-to-end converged solution for voice and data, with zero touch deployment. It's easy to order, install, use and maintain. The OmniPCX Office RCE is the perfect response to the social, mobile and visual forces driving the SMB market. And it's backed by a broad portfolio of compatible Alcatel-Lucent products for SMBs.

OpenTouch Suite for SMB includes the following features:
• Teamwork and collaboration to help teams work together
• Enhanced off-site mobility to keep users connected to their business anytime, anywhere
• Wireline/wireless phones and efficient desktops to increase productivity
• Customer welcome to provide a professional greeting and increase customer satisfaction
• Network infrastructure that reduces costs by using a single infrastructure for voice and data services

OmniPCX Office RCE Small

OmniPCX Office RCE Medium

OmniPCX Office RCE Large

FEATURES	BENEFITS
All-in-one solution	Modularity, flexibility and scalability to meet the needs of SMBs from 4 to 200 people in size
Conversation services on application-enabled desk phones, PCs and smartphones	Offer next-generation enterprise communication experience
User-centric communications experience across devices and locations	Provides full-featured access to enterprise communications services across devices while on site or off
Business communications services, including attendant, routing and messaging services	Increased communication efficiency for mployees with new opportunities to reach contacts
Embedded voice-centric customer service	Increase customer satisfaction by improving call resolution
IP telephony infrastructure flexibility and software scalability	Reduces communication costs and enables the choice of network configurations and IP, IP/TDM or TDM endpoints, minimizing additional investment and enabling a smooth migration
Simplified and unified management	Reduces total costs of ownership for business communication and conversation services
Plug and play and zero touch deployment	Easy installation in full voice environment and/or converged voice/data environment at reduced cost
SIP at the core	Optimized installation ready for next generation of communications

TECHNICAL SPECIFICATIONS

COMMUNICATION SERVICES
Conversation services
- Wideband VoIP, HD video
- Ad-hoc audio, video and web conferencing
- Scheduled audio, video and web conferencing
- Whiteboard and webinar presentation mode with annotation
- Enterprise presence, including conversation status
- Desktop phone and mobile phone control from PC
- Universal directory access
- Call by name
- User Call Log
- Single-identity: routing profiles
  - ¬ User-defined routing rules
  - ¬ Route to one or several devices
- Visual mailbox access

Business communications services
- Centralized directory, call by name
- Multiline telephony
- Call options, speed dial
- Audio conferencing
- Personal and enterprise call routing and forwarding
- Call-back features
- Call history
- Multiline
- Call queuing
- Automatic route selection (ARS)
  - ¬ 3000 entries
  - ¬ Least cost routing
  - ¬ Multicarrier access
  - ¬ ARS overflow on busy carrier
  - ¬ Time range and calendar based
- Direct inward station access (DISA), substitution
- Call recording
- Call pickup
- Paging
- Call back
- Intrusion
- Call deflection
- Divert
- Joining
- Barring
- Paging
- Emergency call

Manager assistant
- Call filtering
- Hot line
- Multiple manager/secretary

Team and group
- Workgroup
- Key system
- Groupware supervision
- Audio notifications
- Group (broadcast, parallel, cyclical, sequential)

Desktop Communications
Alcatel-Lucent OmniTouch™ 8082 My IC Phone
- 7 inch capacitive and haptic touch screens
- Media player, screensaver and pictures
- Microsoft® Outlook™ sync
- Audio conversation services
  - ¬ Unified directory
  - ¬ Session history
  - ¬ Visual messaging
  - ¬ Favorites
- Manager conversations
- Video calls
- SIP and web services
- Third-party web-based applications support
- Software development kit, developer portal
- 10/100/1000 Ethernet
- Bluetooth® handset
- G722, G722.2 wideband audio
- 802.3 AF PoE (class 3)
- Maximum capacity: 20

IP Touch 8 Series Extended Edition IP phones, IP Touch 9 Series digital phones
- Business communication services
- Embedded alpha-numeric keyboard
- Display of participant name and contextual feature keys
- Hands-free, loudspeaker announcement
- Headset capability, such as Bluetooth
- Alcatel-Lucent NOE protocol
- Add-on supervision modules

Pimphony
- Maximum capacity: 200
- Conversation services on PC desktop
- Click-to-call
- Visual mail box, call log
- Supervision (single/multi site)
- Assistant mode (operator)

- PIM/directory
  - ¬ Microsoft Outlook
  - ¬ Act!®
  - ¬ GoldMine®
  - ¬ Microsoft Access™
  - ¬ IBM® Lotus Notes™
  - ¬ LDAP
- Microsoft Windows™ (XP, 7, 8)
- VOIP softphone
- Routing rule configuration (unique number)

My IC Social Networks
- Maximum connections: 25 TAPI 2.0/200TAPI 2.1
- Outlook plug-in
- Call dialog window
- Directory federation
- Presence federation
- Supervision aggregation
- Pounce service
- Facebook®, Yahoo®, Skype™
- Toolbar and context menu: SMS, Call, IM, E-mail, Presence, Forwarding Rules

Alcatel-Lucent OmniTouch™ 8600 My IC Web For Office
- Maximum capacity: 50
- Web-based client
- Dial by name
- Conversation services
- Visual voice mail
- Call log
- Routing rule configuration (unique number)

Mobility services
- One number service: up to three devices
- My IC Mobile application (iOS™ and Android™)
- Unified access (from any devices)
- Nomadic to any phone
- Dual/single ringing
- Get call feature
- Cellular/SIP connectivity
- Business/private call

On-site mobility
Alcatel-Lucent OmniTouch™ 8118/8128 WLAN 300EX/400/500/500EX/8232 DECT
- Business communication services
- Hands-free
- Headset capability
- Integration with notification- and location-based services through Alcatel-Lucent Application Partner Program (AAPP)

On-site and off-site mobility

Alcatel-Lucent OmniTouch™ 8600 My IC Mobile

- Maximum capacity: 50
- Software client with intuitive graphical interface
- Single identity, directory lookup, business caller name presentation, communication history, on-call access to business services
  - ¬ Apple® iPhone™
  - ¬ Google® Android platform
- Routing profiles
- Easy deployment:
  - ¬ Apple AppStore
  - ¬ Google Play
- SIP softphone (SIP Companion in VoIP mode)
  - ¬ Fall back on cellular
  - ¬ Apple

Services

- Get call feature (move mobile call to office phone)
- One number
- Single/dual ringing

Hospitality

- Integrated application (up to 120 rooms)
- Alcatel-Lucent OmniPCX Office Hospitality link (OHL) (Up to 200 rooms)
- Room management
- Wake up
- Phone booth

Metering

- Metering counters
- Traffic counters
- Accounting link
  - ¬ Printout facilities
  - ¬ OHL driver
  - ¬ Over IP accounting
- Local call metering (XML/HTTP)
- Account code
- Duration-based forced disconnect

Conference

- 6-party conference bridge
- 3-party conference
- SIP conference module 4135 (5 parties
- Conference on SIP devices (3 parties)

Attendant Services

- Call queuing
- Call overflow
- Alarm indication
- Attendant group features
- Busy lamp field
- Trunk and charging features
- User management features
- Add-on module
- Headset capability
- Attendant position (e.g., PC, Phone)
- Automatic attendant
- Visitor registration
- Normal/restricted mode control

Directory services

- UDA services
- Dial by name
- Directory aggregation via My IC Social Networks plug-in
- Abbreviated numbers: 2200
- Connection to external LDAP server
- Individual repertories
- Up to 5000 names
- Contact synchronization
- CRM integration

Messaging services

- Voice mail
  - ¬ Mailbox: 200
  - ¬ Max storage: 200 Hours (HD needed)
- IM
  - ¬ Text messaging
  - ¬ Free / preprogrammed
  - ¬ Text messages (32 characters)
  - ¬ IM messaging with My IC Social Networks (SIP based)
- Unified messaging
  - ¬ Voice mail in e-mail
  - ¬ Call log in e-mail

CUSTOMER SERVICES

Architecture

- All-in-one, fully integrated solution
- Phone (Analog, IP Touch 8 and 9 series, SIP, mobile, DECT, WLAN)
- Mixed configuration: ACD, MLAA, SCR and communication services
- ACD/MLAA/SCR ports: up to 16

Smart Call Routing (SCR)

- Maximum entries: 10000
- Routing criteria (customer code, CLI, DDI)
- Routing destinations
  - ¬ ACD, MLAA, any destination
  - ¬ 2 per entry, planning based
- Planning: 10

OmniTouch Call center Office (ACD)

ACD services

- ACD group: up to 8
- Group selection: longest idle time, rotating priority, fixed priority
- Priority levels between groups: 8
- Group overflow
- Queue: 1 per group
- Voice guidance: 7 per group
- Customer code

Agents features

- Maximum 32
- Agent application
- PC agent application (optional)
- Local application on IP Touch 8 and 9 series
- Agent status (logged out, wrap-up time, pause, log in)
- Free seating
- Call classification
- Personal statistics
- Screen pop ups/CRM
  - ¬ Embedded database
  - ¬ API to external CRMs
- Waiting time in queue for call
- Visual queue control
- Outbound call: free dialing, copy and paste, dial by name, LDAP

Supervision

- PC application
- Up to 8 simultaneous connected supervisors
- Real time ACD activity monitoring (agent and group)
- Three presentation modes (modular, grid, tool bar)

Statistic

- PC application
- System retains data for 14 months
- Automatic printing of predefined reports
- CSV export

Welcome greeting

Voice mail

- Without hard disk: 30 hours
- With hard disk: 200 hours
- Up to 8 ports
- Up to 200 mailboxes

Personal assistant

- Transfer options: 5

Automated attendant

- 2 levels (customizable)
- General mail box
- Welcome service
- Information service: 50 information boxes
- Company greeting remote customization - opening and closing hours

Attendant group

- Maximum attendant group: 8
- Maximum attendants per group: 8
- Night greeting
- Restricted mode
- Time range (daily, weekly, bank holidays)

Attendant console

- PC-based application

Multiple automated attendant (MLAA)

- Maximum languages per tree: 4
- 5 different trees
- 3 level per tree
- Voice prompts per language: 100
- Time range: 10
- Greeting messages
- Maximum greeting : 20
- Total duration: 320 s
- Individual, group, company
- Music on hold
- 16 seconds Default
- Customized up to 10 minutes
- External source
- Multiple company welcome
- Maximum entities (groups of users): 4
- 10 minutes music on hold per entity

External Applications

Video

- LifeSize® Connections: cloud-based solution
- LifeSize® Unity™ 50, Passport™, Express™ 220, Team™ 220, Icon™ 600: Desktop audio/video appliances for office and remote workers
- Doorphone, SIP, My IC Phone peer-to-peer video

Fax services

- G3, super G3 fall-back
- Automatic fax detection
- ITU-T T.38 UDP fax call (trunk)
- Fax over ITU-T G.711
- Fax ECM option (H2/2013)

RCE Fax Server

- Up to 110 users
- Up to 4 fax channels (SIP TRK)

OPERATIONS

Management

- OMC (PC-based application)
  - ¬ Access level (administrator, admin, operator)
  - ¬ Connectivity
    - – IP (HTTPS)
    - – ISDN (1 or 2 B)
    - – Call back
  - ¬ Platform
    - – Window,
    - – Windows server
  - ¬ Unique management access point
  - ¬ Customer database backup and migration
- Web-based portal
  - – Diagnostic
  - – Simple actions
- Local administration (from the phone device)

Serviceability

- NTP server/client
- Alarming
  - ¬ Urgent/non urgent
  - ¬ Alarming in email
- History event
- Zero touch
  - ¬ DHCP
  - ¬ Plug-and-play
  - ¬ OmniSwitch auto provisioning

INFRASTRUCTURE

Capacity

- 200 users (IP and-or TDM)
- BHCA 1500

Architecture

- All-in-one call server
- Switching: TDM and IP + hybrid

Software

- Linux: Linux Kernel 2.6.29.6

Hardware

CPU board

- PowerCPU (PowerPC e300)
  - ¬ Covers
    - – Chassis (compact, S, M, L)
    - – All requirements and options
  - ¬ 2Gb SD memory card
  - ¬ Hardware watchdog
- 20Gb hard drive (option)
- 16 VoIP DSP channel (option of up to 48)

- Daughter board
  - ¬ AFU: CD-player, door phone, loudspeaker
  - ¬ HSL1 or HSL2 : for multiple cabinet interconnection (S,M,L chassis)
  - ¬ MiniMIX 2/0/2 (compact chassis only)

Chassis

- Compact (C) Edition
  - ¬ AC/DC power supply: external
  - ¬ Backup battery: external (optional)
- Installation: office environment, wall-mounted
  - ¬ 1 free modular slot
  - ¬ No fan
  - ¬ Height: 70 mm (2.75 in.)
  - ¬ Width: 345 mm (13.58 in.)
  - ¬ Depth: 340 mm (13.38 in.)
  - ¬ Weight (unpacked): 5.1 kg (11.24 lb.)
  - ¬ Power maximum/typical: 40 W / 25W
  - ¬ Noise level: 0
- Chassis: racks S, L, M
  - ¬ Standard in S, M, L Editions
    - – Fan
    - – Rack (19-inch rack)
    - – AC/DC power supply: Integrated
    - – Backup battery: Internal / external (Option)
    - – Installation: stack, rack, wall-mounted
    - – Combination: up to 3 chassis, maximum of 27 free slots
  - ¬ Small (S) 1U
    - – 2 free modular slots
    - – Height: 66 mm (2.60 in.)
    - – Width: 442 mm (17.40 in.)
    - – Depth: 400 mm (15.75 in.)
    - – Weight (unpacked): 6 kg (13.22 lb.)
    - – Power maximum/typical: 70W/28W
    - – Noise level: maximum 40dBA
  - ¬ Medium (M) 2U
    - – 5 free modular slots
    - – Height: 111 mm (4.37 in.)
    - – Width: 442 mm (17.40 in.)
    - – Depth: 400 mm (15.75 in.)
    - – Weight (unpacked): 11 kg (24.25 lb.)
    - – Power maximum/typical: 88W/40W
    - – Noise level: Max 41dBA
  - ¬ Large (L) 3U
    - – 8 free modular slots
    - – Height: 154 mm (6.06 in.)
    - – Width: 442 mm (17.40 in.)
    - – Depth: 400 mm (15.75 in.)
    - – Weight (unpacked): 13 kg (28.7 lb.)
    - – Power maximum/typical: 108W/57W
    - – noise level: Max 45dBA

Interface boards

- Terminals
  - ¬ Digital Interfaces UAI 4, 8, 16
  - ¬ Analog Interfaces SLI 4, 8, 16
- Network
  - ¬ BRA boards (T0) 2, 4, 8
  - ¬ PRA boards (T1, T2) 1
  - ¬ Analog trunk(1) 2,4
  - ¬ Mixed boards T0/UA/SL 2/4/4, 4/4/8, 4/8/4
  - ¬ Analog mixed boards APA/UA/SL 4/4/4-1, 4/4/8-1, 4/8/4-1
  - ¬ Mini-MIX2/0/2
- LAN
  - ¬ Ethernet LANswitch LanX 16 10/100/1000 BT auto-sense unmanaged

Application partner interfaces (AAPP)

- SIP
- CSTA, TAPI 2.0, TAPI 2.1
- Alcatel-Lucent Hospitality Link
- Local call metering application (LCMA)
- Alcatel-Lucent OmniVista 8770 Accounting and VoIP Ticket Collector, call detail records
- QSIG
- Urgent alarm (SIP/ISDN trunk)

SIP: Session Initiation Protocol

- SIP public trunk
- SIP private trunk
- SIP peering
- SIP end points (local users)
- Alcatel-Lucent SIP devices
- Third-party devices (AAPP)
- SIP capabilities
  - ¬ RTP direct
  - ¬ Multiple RTP flow
  - ¬ SIP notification (IM)
  - ¬ Video (RTP direct)
- Public configurable SIP number format
- Support for multiple SIP registrars
- Backup proxy (immediate swap)

IETF standards

- SIP RFC
  - ¬ Trunk standards compliance
    RFC 3261 RFC 3262 RFC 3264
    RFC 2327 RFC 2833 RFC 2822
    RFC 3515 RFC 3966 RFC 3398
    RFC 3323 RFC 3324 RFC 3325
    RFC 3892 RFC 1321 RFC 2617
    T38 ITU-T RFC 3263-   RFC 4244
    RFC 3326 RFC 3840 RFC 4028
    RFC 3581 RFC 4916

  - ¬ Phone standards compliance
    RFC 3261 RFC 2327 RFC 3515
    RFC 4733 RFC 3891 RFC 3420
    RFC 3265 RFC 3550 RFC 3551
    RFC 3264 RFC 3842 RFC 3966
    RFC 3892 RFC 1321 RFC 2616
    RFC 2617 RFC 5373 RFC 3398
    RFC 3323 RFC 3325 RFC 4028
- RTP RFC: 1889, 1890, 2198, 3550, 3551, 3711, 3362
- SIP best practices: RFC 4504

VoIP

- G722, G722.2 audio wideband
- G.711 A-law and μ-law, G.723.1A, G.729.AB audio
- G711, G722, G723.1, G729, G.722.2
- Call admission control
- Automatic compression algorithm allocation
- Dynamic jitter buffer, echo cancellation, packet loss concealment (PLC), VAD: silence suppression and comfort noise generation
- DTMF Q23, robust DTMF relay, RFC 2833
- Generic signal qualification and modem transport
- Anti-saturation mechanism; backward and forward automatic gain control
- Embedded signal quality diagnostic tool
- Quality of service: TOS or DiffServ tagging, 802.1 p/Q

Video

- Codec path through (RTP direct)
- LifeSize Video Center (AAPP)
- Door phone(s) integration
- Peer-to-peer (SIP device/trunks)

Networking
Private networking protocols
- SIP networking
- H323 networking
- ISVPN (T0/T2)
- QSIG-BC (DLT0 DLT2)

ARS (automatic route selection)
- Maximum of 3000 entries
- Multi-carrier access

Multisite
- Up to 5 sites
- PC-based supervisor application
- Directory synchronization (OMC)

Security

Authentication
- User authentication: login/password (4 or 6 digits)
- Management authentication: login/password (8 characters)
- HTTPS: server certificate self-signed
- System certificate export

Traffic filtering
- Cal server
  - ¬ ARP spoofing protection
- Client/device (IP Touch / MyIC 8082)
  - ¬ ARP spoofing protection
  - ¬ PC port filtering

SIP perimeter defense
- SIP method authentication (RFC 2617) for SIP phones and public SIP trunking
- Quarantine/blacklisting due to abnormal traffic (too many messages in a short time)
- Automatic blacklist for hostile IP addresses
- Thresholds for identifying hostile IP addresses
- Connection tracking

Encryption
- SSLv3 for secure HTTP session
- HTTPS: 2048 bits RSA keys

User authorization to communication services
- User account lock notification (alarm, e-mail)
- Management account lock notification (alarm, e-mail)
- 4 or 6 digit password (user)
- PIN codes for calls (barring and substitution)
- Barring categories
- PIN for remote substitution (DISA)
- Remote access locked after repeated authentication errors
- Normal/restricted modes, based on time ranges
- User rights to service

Miscellaneous
- Network time protocol (NTP) server and client for network-wide time synchronization
- Remote access by modem:
  - ¬ List of authorized CLI
  - ¬ Call back to configured number
- HTTPS for management and end-user applications

Alarm server

- Live and notification call services with location information
- Periodic live call for proactive security
- Alarm calls with specific alarm button, man down, shock, "no movement" detection
- Key events calls for end user signaling task progress
- Status call for updating handset status to central server
- Alarm server
  ¬ T2 connectivity
  ¬ SIP connectivity
- Isolated worker protection device (PTI)
- DECT

DECT radio

- Radio DECT/GAP/AGAP
- Radio frequency range
  ¬ 1.88 GHz to 1.90 GHz (Europe)
  ¬ 1.91 GHz to 1.93 GHz (South America)
  ¬ 1.92 GHz to 1.93 GHz (United States) with power adaptation
- 4070 DECT Base Station
  ¬ Six simultaneous communications
  ¬ 2 UA interfaces
  ¬ Maximum devices registered: 120
  ¬ Inline powered
- 4080 IP DECT Access Point
  ¬ 11 simultaneous communications per AP
  ¬ 16 AP
  ¬ Maximum devices registered: 50
  ¬ POE or POE injector
  ¬ Outdoor versions
  ¬ Integrated DAP manager for automated configuration and handset roaming
  ¬ Over-the-air synchronization

WLAN

OmniAccess WLAN access points and WLAN controllers

- IEEE 802.11a/b/g/n
- IEEE 802.11i
- Radio frequency (RF) range
  ¬ 2.4 GHz to 2.4835 GHz ("b" and "g")
  ¬ 5.150 ~ 5.250 GHz (low band)
  ¬ 5.250 ~ 5.350 GHz (mid band)
  ¬ 5.470 ~ 5.725 GHz (Europe)
  ¬ 5.725 ~ 5.850 GHz (high band)

Automated radio coverage

- Dynamic RF management for AP channel power and channel optimal setting
- Self-healing around failed access points

Wireless security

- WEP, WPA, WPA-PSK, WPA2 and WPA2-PSK
- Integrated stateful firewall
- Rogue access point detection and containment
- Wireless IDS/IPS

Quality of service

- Standardized
  ¬ Over-the-air QoS: 802.11e
  ¬ WMM (EDCA)
  ¬ 802.11e Power Save (U-APSD)
  ¬ 802.11e Traffic Specification (TSPEC)
- SRP mode
- Connection admission control with graceful load balancing
- 802.1p DiffServ marking

Call persistency

- Proxy mobile IP for Layer 3 handover
- Fast handover – WPA2 opportunistic key caching
- Voice-aware scanning
- Voice-aware 802.1x re-authentication

International directives

EC Directives

- 94/9/EC: ATEX
- 1999/5/EC: R&TTE
- 1999/519/EC: SAR
- 2011/65/EU : ROHS
- 2012/19/EU : WEEE
- 2004/108/EC: EMC
- 2009/125/EC : Ecodesign
- 2006/95/EC: LVD

Safety

- IEC 60950-1
- UL 60950-1

SAR

- Cenelec EN50360
- Cenelec EN50385
- FCC OET 65 and IEEE 1528

EMC

- IEC-CISPR22 Class B
- Cenelec EN55022 Class B
- FCC Part 15B
- IEC-CISPR24
- Cenelec EN55024
- IEC-EN61000-3-2
- ETSI-EN 301 489-06: DECT
- ETSI-EN 301 489-17: Bluetooth and WLAN

Radio

- ETSI EN 300 328: 2.4 GHz
- ETSI EN 301 893: 5 GHz
- ETSI EN 301 406: DECT
- FCC Part 15 Subpart C and D and E

EX environment

- Cenelec EN 60079-0
- Cenelec EN 60079-11

Miscellaneous environments

- Cenelec EN 50121-4: railway applications
- IEC 60945: maritime

Environmental conditions

- ETSI – ETS 300 019 Part 1-1: storage
- ETSI – ETS 300 019 Part 1-2: transportation
- ETSI – ETS 300 019 Part 1-3: in use

Telecom

- ETSI EG 201 121
- ETSI ES 203 021
- ETSI TBR 021, 010, 022, 003, 033, 004, 034, 008, 038
- ITU-T H.323
- FCC part 68
- Canada CS03

Over voltage and over currents

- ITU-T K.21, K.22

Alcatel·Lucent
Enterprise