



## OpenTouch Suite for SMB

Simplify your communications  
and maximize your business

# Simple. Robust. Connected.

## OXO Connect

Designed for small and medium-sized enterprises



OXO Connect  
Compact



OXO Connect  
Small



OXO Connect  
Medium



OXO Connect  
Large

Robust and expandable up to 300 users as business grows, the OXO Connect can be installed in business or hospitality mode.

### Integrated hospitality solution

- Standard hotel features: check-in/out, pre-check out, pre-payment, wake up, room status...
- Limit of 300 guest rooms and administrative phones

### OXO Connect Compact

- Wall-mounted cabinet
- Fanless design

### OXO Connect Small, Medium, Large

19-Inch cabinet design for optimal expandability

### PowerCPU Extended Edition

- High-performance PowerCPU EE for all platforms
- Purple stiffener with Rainbow Ready sticker
- VoIP and SIP ready
- Connected to network to deliver added-value services in the cloud

### Features directly embedded

- Rainbow Agent
- Personal assistant
- 10 minutes customized music on hold and 4 system languages
- Voicemail and user mailbox greeting with 2 ports and 60 minutes of voice mail storage
- PIMphony™ basic for all users
- Unified Instant Messaging
- LDAP support for universal access embedded now on OTCV, Premium DeskPhones, My IC Web and PIMphony Touch
- Hot Desking

### Additional options

- Mobile and collaborative applications
- Automated Attendant (AA), Multiple AA (MLAA)
- SIP and CTI Openness
- SIP trunking
- Smart Call Routing
- Call Center Office

# Wireline phones

## Premium DeskPhones with IP and digital connectivity

Innovative designed sets for professional IP or digital telephony



8078s BT



8068s BT



8058s



8038/8039



8029



8028s

- Superlative voice quality
- Optimized ergonomics, Navigator, Intuitive icons and soft keys
- Dedicated function keys
- Backlit Display
- Alphabetic keyboard
- Build-in security

### Specific for “s” series IP models

- Design & usability improvements
- USB ports, VPN client
- Bluetooth Low Energy on 8068s BT and 8078s BT

### IP Desktop Softphone

8068 emulation with VoIP



- On PC, Mac, tablets, iPad, and smartphones
- With virtual add-on module

### OmniTouch® 4135 IP Conference Phone



A SIP-based plug-and-play-audio conferencing phone with up to 4 simultaneous connections

### Accessories

- Premium Add-ons Modules
- Comfort & Bluetooth Handset
- Monaural, Binaural and Bluetooth Headset
- Premium Wall Mounting Kit (except 8078s)
- Audiooffice Conference Modules



8115



8125

### 8018 DeskPhone

Perfect for essential and enriched IP telephony



- Advanced telephony features
- Backlit B&W graphical display
- USB connector, VPN client
- Class 1: low power consumption
- Wall mounting kit

### 8001/8001G SIP, 8008 & 4019 Phones

For the low end IP & digital market



8001



8008



4019

- Character display, loudspeaker, mute key
- VPN client (8008 DeskPhone)

# Wireless phones

## DECT Handsets

For mobile communication within the company in IP and digital mode



Business 8212  
DECT Handset



Business 8232  
DECT Handset



Business 8242  
DECT Handset



Industrial 8262  
DECT Handset



Industrial 8262Ex  
DECT Handset

### Business 8212 DECT Handset

- Modern design
- Telephony features
- Hands free
- Colored screen
- GAP mode

### Business 8232 DECT Handset

- Rich business telephony
- Color display
- Headset connector
- Mini-USB port on the charging cradle
- Alarms Notifications
- Get Call Feature

### Business 8242 DECT Handset

- Rich business telephony
- Large screen, Color display
- Headset Connector
- Bluetooth support
- Red Emergency key
- Live, Event keys, Alarm status
- Get Call Feature

### Industrial 8262 DECT Handset

- All capabilities of 8242 DECT Handset
- Unparalleled robustness
- Ruggedized IP65, designed for industrial environments
- Bluetooth Low Energy
- Isolated Worker Protection
- Man down, No Movement, Pull cord
- Alarm/locator function (alarm server required)

### Industrial 8262 Ex DECT Handset

- All capabilities of 8262 DECT Handset
- For hazardous work environments where there is a risk of explosion

## Voice over WLAN phones

Mobile voice communication over wireless LAN



### 8118 WLAN Handset

Black and white display, Vibrate mode, Headset connector, Get Call Feature



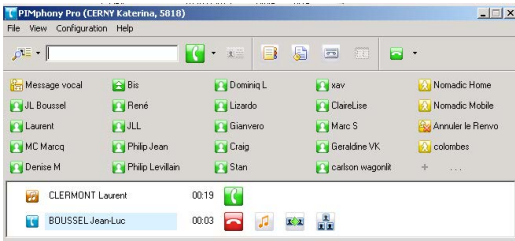
### 8128 WLAN Handset

All the 8118 features plus Push-to-talk feature, color display, Hands-free

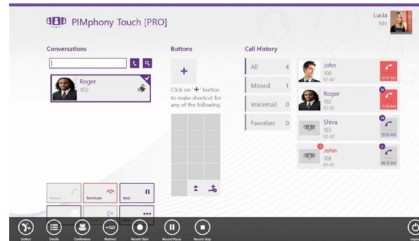
# Efficient communications

## Feature-rich applications for improved call-handling

Communication solutions to increase productivity



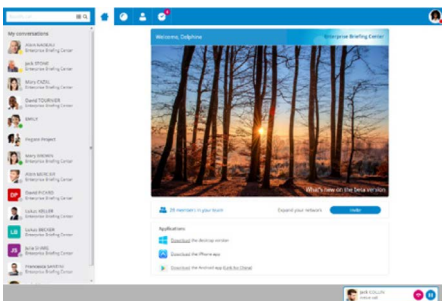
PIMphony



PIMphony Touch



My IC Web



My IC Web

- A web-based solution for call handling, with a standard browser
- Any phone as an extension
- Optimal for use off-site or at home

## Hot Desking

- Management of TDM, IP and analog phones in a free seating



## Rainbow Application

- Unified Communication cloud application, integrated with OXO Connect R2.2 systems
- Contact management, presence, IM, audio/video calling, screen sharing, and file sharing via desktops and smartphones
- Rainbow Essential: mobility and borderless communication with business community
- Try out this new app! Sign in for free right now at: [www.openrainbow.com](http://www.openrainbow.com)

## PIMphony and PIMphony Touch

- Personal communication manager
- Incoming and outgoing calls controlled from a Windows PC client

## Professional Greeting: Customer welcome, call routing and automated attendant features

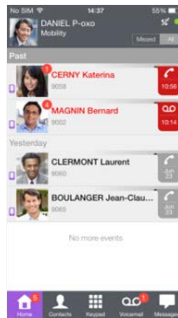
To increase in customer satisfaction

- Voicemail
- Personal Assistant: Automatic call routing defined by user
- Greeting messages: Up to four customizable company greetings
- PC-based and Phone Attendant console
- Automated Attendant (AA): Global solution for company welcome
- Multiple Level AA: Global solution for company welcome for multi-brand/multi-language companies and advanced AA needs
- Smart Call Routing: with 10,000 entries or Contact Center
- Call Center Office: automatic call routing with PC applications to support call handling (Agent Assistant, Supervisor Console, Statistic Manager) with up to 8 groups and 32 active agents

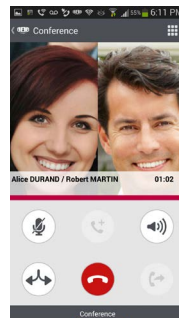


# Powerful external mobility

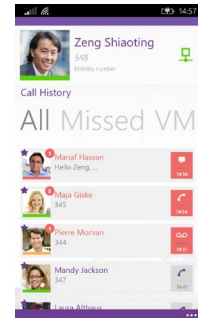
One phone, one number and one voice mail, on-site or off-site to keep you connected to your business anytime, anywhere



OTCV iPhone



OTCV Android



OTCV Windows

## One-number services

- Make any mobile phone an office extension
- Improve accessibility through a single business number

## OpenTouch Conversation® for iPhone

- Free of charge client to download from App Store, software licence needed on OXO Connect

## OpenTouch Conversation for Android

- Free of charge client to download from Google Play Store, software licence needed on OXO Connect

## OpenTouch Conversation for Windows Phone

- Free of charge client to download from Windows Store, software licence needed on OXO Connect

	OTCV iPhone	OTCV Android	OTCV Windows
Routing Rules, Mobility Management	X	X	X
In conversation services, Transfer	X	X	X
Conference	X	X	X
Forward options: forward, redirect	X	X	X
Call logs	X	X	X
Visual voice mail	X	X	X
Unified Instant Messaging	X	X	X
Unified Directory Access, Dial-by-name	X	X	X
Favorites	-	X	X
Telephony Presence	-	-	X
Get Call Feature	X	X	X
SIP Companion in VoIP mode to leverage company Wi-Fi for both voice and data	X	X	-
Easy VPN (use Mobile as VPN client)	X	X	-
NFC / QR code	-	X	-

# Affordable, smart network infrastructure

## LAN infrastructure

Cost savings with a single infrastructure for integrated voice/data services with or without Power Over Ethernet (PoE)



### OmniSwitch® 6350

- Gigabit Ethernet switch
- 10, 24 and 48 ports with/without PoE
- 10 ports, fanless, with/without PoE
- 24 ports, fanless, (no PoE)
- Excellent for WLAN and IP Telephony solutions



### OmniSwitch 6450

- Gigabit Ethernet switch
- 24 and 48 ports with/without PoE (upgrade possible from 1GB to 10GB)
- 10 ports, fanless, with PoE
- Excellent for WLAN and IP Telephony solutions

## WLAN infrastructure

Cost savings with a single infrastructure for integrated voice/data/WLAN (Wi-Fi) services (when coupled with LAN infrastructure products)



### OmniAccess® RAP-3WN(P), RAP 108/109

- Single radio (RAP-3WN) and Dual radio (RAP 108/109)
- For the home office and external Extensions
- RAP3WN/RAP3WNP: IEEE 802.11 b/g/n, 2x2 single radio support (WNP version provides PoE on one port)
- OA RAP-108/109: IEEE 802.11a/b/g/n, 2x2:2, dual radio support



### Wi-Fi access points

- OmniAccess Stellar AP1101 is a controller-less indoor AP with 802.11ac dual radio 2x2 MIMO supporting 2 spatial streams to up to 1,2 Gb/s data rates, IEEE 802.3af PoE sourcing
- OmniAccess Stellar AP1221/1222 are controller-less indoor AP with 802.11ac dual radio 4x4 MIMO supporting 4 spatial streams to up to 2,2+ Gb/s data rates, IEEE 802.3af/802.3at PoE sourcing
- OmniAccess Stellar AP1251 is a controller-less outdoor AP with 802.11ac dual radio 2x2 MIMO supporting 2 spatial streams to up to 1,2 Gb/s data rates, IEEE 802.3af PoE sourcing, IP67 compliant
- OmniAccess AP/IAP 205(H) indoor AP with 802.11ac, dual radio 2x2 MIMO supporting 2 spatial streams to provide up to 1,2 Gb/s data rates, IEEE 802.3af PoE sourcing

## DECT infrastructure

Best of voice services for on-site mobility



### 4070 - Radio Base Station

- Indoor / Outdoor DECT radio base station
- Support of all DECT ranges



### 8340 IP-DECT Access Point

- IP connectivity – PoE 802.3af
- Support of DECT and GAP devices

Contact your Alcatel-Lucent Enterprise reseller to find out more about OpenTouch® Suite for SMB.

[smb-enterprise.alcatel-lucent.com/en](http://smb-enterprise.alcatel-lucent.com/en)



# Alcatel-Lucent OXO Connect

Small and medium businesses

To compete and succeed in today's marketplace, small- and medium-sized businesses (SMBs) need enterprise-class products. With increased simplicity, confirmed robustness and being connected, – all at a lower cost – the Alcatel-Lucent OpenTouch® Suite for SMB helps businesses grow.

Alcatel-Lucent OpenTouch Suite for SMB offering is based on the new generation of communication server called OXO Connect. This robust communication server for small and medium companies is ready to connect and deliver cloud services with an extended capacity of up to 300. Moreover, OXO Connect has a simplified licensing built on a single Universal Telephony License and a new service offer that guarantees three years of free software upgrades. With this new offer, Alcatel-Lucent Enterprise starts a new era for SMB and confirms its leading position in this market.

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



**OXO Connect Compact Edition**



**OXO Connect Small**



**OXO Connect Medium**



**OXO Connect Large**



Features	Benefits
Connected	To deliver advanced cloud services: Rainbow, UC cloud based services and new remote management operation
All-in-one solution	Modularity, flexibility and scalability to meet the needs of SMBs from 4 to 300 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 employees 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
- Enterprise presence, including conversation status
- Desktop phone and mobile phone control from PC
- Universal directory access
- Single-identity: routing profiles
  - ↳ User-defined routing rules
  - ↳ Route to one or several devices
- Visual mailbox access
- Hotdesking

#### Rainbow services

- Cloud Hybrid connection with Rainbow Agent
- Rainbow PBX services
- URL: [www.openrainbow.com](http://www.openrainbow.com)

#### Business communications services

- Unified Directory access, call by name
- Unified call log
- Unified Instant messaging
- Multiline telephony
- Call options, speed dial
- Audio conferencing
- Personal and enterprise call routing and forwarding
- Call-back features

- Multiline
- Call queuing
- Automatic route selection (ARS)
- Direct inward station access (DISA), substitution
- Call recording
- Call pickup
- Paging
- Call back
- Intrusion
- Call deflection
- Divert
- Joining
- Barring
- Paging
- Emergency call
  - ↳ with local notification service and history
  - ↳ Virtual number (locations, PSAPs)

#### 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

### Premium DeskPhones

- Alcatel-Lucent 8028s, 8038, 8058s, 8068s, 8078s Premium DeskPhones (IP)
- Alcatel-Lucent 8029, 8039 Premium DeskPhones (Digital)
- Business communication services
- Embedded alpha-numeric keyboard
- Back light
- Display of participant name and contextual feature keys
- Hands-free, loudspeaker announcement
- Headset capability, such as Bluetooth and USB
- Alcatel-Lucent NOE protocol
- Add-on supervision and smart display modules
- Remote worker: Embedded VPN client
- Predefined and custom Skins

### DeskPhones

- Alcatel-Lucent 8008, 8018 DeskPhones
- Alcatel-Lucent 4019 Digital Phone
- Alcatel-Lucent 8001/8001G DeskPhones

## Datasheet

Alcatel-Lucent OXO Connect

### Third-party SIP Phones

- Third-party SIP
  - ↳ Open SIP
  - ↳ Basic SIP

### Alcatel-Lucent IP Desktop Softphone

- Softphone for business communication services
- Emulates Alcatel-Lucent 8068 Premium DeskPhone
  - ↳ 8068 look and feel
  - ↳ Full feature level (identical to 8068)
  - ↳ Smart display software module
- Supported platforms
  - ↳ PC
  - ↳ MAC
  - ↳ Android™
  - ↳ iOS

### PIMphony™ Touch

- Maximum capacity: 200
- Microsoft Windows (Modern UI) for PC and tablet
- Easy deployment: Windows Store
- Services
  - ↳ conversation services
  - ↳ conference, record online
  - ↳ unified instant messaging
  - ↳ unified call log
  - ↳ unified visual voice mail
  - ↳ unified directory access
  - ↳ one number, routing profile, mobility management
  - ↳ favorites, programmable buttons
  - ↳ telephony presence

### PIMphony

- Maximum capacity: 200
- Microsoft Windows (desktop mode)
- 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
- VOIP softphone
- Routing rule configuration (unique number)

### Alcatel-Lucent My IC Web

- Maximum capacity: 200
- Web-based client
- Dial by name
- Conversation services
- Conference & Call recording
- Instant messaging
- Visual voice mail
- Call log
- Routing rule configuration (unique number)

### Mobility services

- One number service: up to three devices per user
- OpenTouch Conversation (iOS, Android, and Windows Phone), DECT & WLAN
- Unified access (from any devices)
- Nomadic to any phone
- Multiple/single call presentation
- Get call feature

### On-site mobility

#### Alcatel-Lucent 8118/8128 WLAN and 8212/8232/8242/8262/8262Ex DECT Handsets

- Business communication services
- Hands-free
- Headset capability
- Unified call log (AGAP set only)
- Integration with notification- and location- based services through Alcatel-Lucent Application Partner Program (AAPP)

### On-site and off-site mobility

#### OpenTouch Conversation (OTCV)

- Maximum capacity: 50
- Software client with intuitive graphical interface for following platforms:
  - ↳ Apple iPhone
  - ↳ Google Android
  - ↳ Microsoft Windows Phone
- Single identity, business caller name presentation, communication history, on-call access to business services

- Easy deployment:
  - ↳ Apple AppStore
  - ↳ Google Play
  - ↳ Windows Store
- Services
  - ↳ conversation services
  - ↳ conference
  - ↳ unified instant messaging
  - ↳ unified call log
  - ↳ unified visual voice mail
  - ↳ unified directory access
  - ↳ SIP softphone (SIP companion iOS and Android)
  - ↳ fall back on cellular
  - ↳ one number, routing profile, mobility management
  - ↳ one number, routing profile, mobility management
  - ↳ favorites
  - ↳ telephony presence

### Hospitality

- Max room (guest rooms and administrative sets) 300
- Integrated application (up to 120 rooms)
- Alcatel-Lucent OXO Connect Hospitality link (OHL) (up to 300 rooms)
- Room management
- Wake up
- Multiset support
- 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
- Abbreviated numbers: 2200
- Connection to external LDAP server
- Individual repertories
- Up to 5000 names
- Contact synchronization
- CRM integration

## Messaging services

- Voice mail
  - Mailbox: 500
  - Max storage: 200 Hours
- IM
  - Unified IM among user's devices and Applications
  - Instant notification, Conversation, read status
  - System storage: Up to 5000, Up to 30 days
  - Up to 100 characters per IM
- Text messaging (does not cohabit with IM)
  - Free/preprogrammed
  - Text message (32 characters)
- Unified messaging
  - Voice mail in e-mail
  - Call log in e-mail

## Customer services

### Architecture

- All-in-one, fully integrated solution
- Phone (Analog, Smart DeskPhones, DeskPhones, Premium DeskPhones, SIP, OTCV, Alcatel-Lucent IP Desktop Softphone, 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

### 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

- SIP video peer-to-peer, Rainbow UC

### 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

## Operations management

- OMC (PC-based application)
  - Access level (administrator, admin, operator)
  - Connectivity
    - IP (HTTPS)
    - VPN IPSEC (Cloud Connect)
    - ISDN (1 or 2 B)
    - Call back
  - Platform
    - Windows
    - Windows Server
  - Unique management access point
  - Customer database backup and migration
- Web-based portal (IP HTTPS)
  - Diagnostic
  - Simple actions
- Local administration (from the phone device)
- Alcatel-Lucent Cloud Connect
  - Cloud Web Portal
    - Fleet Dashboard for ALE equipments
    - OXO Connectivity
  - OXO Cloud Connect Agent
    - Embedded in call server
    - HTTPS
    - VPN IPSEC (On demand)
    - License free
    - Firewall friendly (outbound connection)

## Serviceability

- Universal Telephony License
- NTP server/client
- SNMP (V2C)
  - MIB (read only)
  - TRAP: urgent alarm
- Alarming
  - Urgent/non urgent
  - Alarming in email
- History event
- Zero touch
  - DHCP
  - Plug-and-play
  - Alcatel-Lucent OmniSwitch® auto provisioning
  - Alcatel-Lucent OmniAccess® Stellar auto provisioning
  - SIP profile import

## Infrastructure

### Capacity

- 300 users (max devices)
- BHCA 1500
- Capacity limits (overview)
  - Analog (2 wires) 300
  - IP and SIP 300
  - TDM 288

### Architecture

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

### Software

- Linux: Linux Kernel 2.6.29.6

### Hardware

#### CPU board

- PowerCPU EE (PowerPC e300)
  - Covers
  - Chassis (compact, S, M, L)
  - All requirements and options
  - Memory Storage Daughter Board (MSDB): 8GB ( EMMC)
  - Hardware watchdog
  - 16 VoIP DSP channel
- Daughter board (optional)
  - AFU: CD-player, door phone, loudspeaker
  - HSL1 or HSL2 : for multiple cabinet interconnection (S,M,L chassis)
  - MiniMIX 2/0/2 (compact chassis only)
  - VoIP 32 (increase to 48 VoIP channels)
  - VoIP 64 (increase to 76 VoIP channels)

#### 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
- Static NAT (SIP ALG/ SBC less topology)
- Header to routing based
- Support for multiple SIP registrars (Per DDI, per range)
- Backup proxy (immediate swap)
- Dual Inband DTMF/ RFC 2833

### IETF standards

- SIP RFC
  - ↳ Trunk standards compliance RFC 3261, RFC 3261, RFC 3262, RFC 3264, RFC 2327, RFC 2833, RFC 2822, RFC 3515, RFC 360, RFC 3966, RFC 3398, RFC 3323, RFC 3324, RFC 3325, RFC 3892, RFC 1321, RFC 2617, T38 ITU-T, RFC 3263, RFC 4244, RFC 4904, RFC 3605, RFC 3326, RFC 3840, RFC 4028, RFC 3581, RFC 4916, RFC 3052, RFC 3327, RFC 4566, RFC 6140, TS 24.229

- ↳ 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, RFC 4566
- RTP RFC: 1889, 1890, 2198, 3550, 3551, 3711, 3362
- SIP best practices: RFC 4504

### VoIP

- G722, audio wideband
- G.711 A-law and  $\mu$ -law, G.723.1A, G.729. AB audio
- 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
- In band DTMF
- 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
- Least cost routing
- Multicarrier access
- ARS overflow on busy carrier
- Time range and calendar based

### 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
- System certificate import from Public authority
- Call server compliant with HTTP proxy

#### Traffic filtering

- Call 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
- VPN IPSEC (Cloud Connect Agent)

#### User authorization to communication services

- User 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 and Local LAN 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
- Alcatel-Lucent 4070 DECT Base Station
  - Six simultaneous communications
  - 2 UA interfaces
  - Maximum devices registered: 200
  - Inline powered

- Alcatel-Lucent 8340 IP-DECT Access Points
  - 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
  - Mixed DECT and IP DECT configuration

### WLAN

- OmniAccess® WLAN access points and WLAN controllers: see related Datasheets
- OmniAccess Stellar: see related Datasheets

### International directives

#### EC & EU Directives

- 1999/519/EC: SAR
- 2009/125/EC: Ecodesign
- 2011/65/EU: ROHS
- 2012/19/EU: WEEE
- 2014/53/EU: RED
- 2014/35/EU: LVD
- 2014/30/EU: EMC
- 2014/34/EU: ATEX

#### Safety

- IEC 60950-1
- UL 60950-1

#### SAR

- Cenelec EN50360
- Cenelec EN50385
- Cenelec EN62311
- FCC OET 65 and IEEE 1528

### EMC

- IEC-CISPR22 Class B
- IEC-CISPR32 Class B
- Cenelec EN55022 Class B
- Cenelec EN55032 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

- 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