## **UCM6510** IP PBX Appliance





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The UCM6510 is an innovative IP PBX appliance for E1/T1/J1 networks that brings enterprise-grade Unified Communications and security protection to enterprises, small-to-medium businesses (SMBs), retail environments and residential settings in an easy-to-manage fashion. Powered by an advanced hardware platform and revolutionary software functionalities, the UCM6510 offers a breakthrough turnkey solution for converged voice, video, data, fax, security surveillance, and mobility applications out of the box without any extra license fees or recurring costs.

## **Feature Highlights**

- 1GHz quad-core Cortex A9 application processor, large memory (1GB DDR3 RAM, 32GB Flash) and dedicated high performance multi-core DSP array for advanced voice processing
- 1 integrated T1/E1/J1 interface, 2 PSTN trunk FXO ports, 2 analog telephone/Fax FXS ports with lifeline capability in case of power outage and unlimited SIP trunk accounts
- Hardware DSP based 128ms-tail-length carrier-grade line echo cancellation (LEC), hardware based caller ID/call progress tone and smart automated impendance matching for various countries
- Gigabit network port(s) with integrated PoE, USB, SD card; integrated NAT router with advanced QoS support
- Strong defense against malicious attacks (Fail2ban, Whitelist, Blacklist, alerts, etc.)
- Data communication via T1/E1/J1 and data-voice combined communication via T1/E1/J1 with SS7 or PRI

- Supports up to 2000 SIP endpoint registrations, up to 200 concurrent calls (up to 100 SRTP encrypted concurrent calls) and up to 64 simultaneous conference attendees
- Flexible dial plan, call routing, site peering, call recording (manual & automatic per SIP call & SIP trunk), control panel for endpoints, integrated NTP server & integrated LDAP contact directory
- Automated detection and provisioning of IP phones, video phones, ATAs, gateways, SIP cameras and other endpoints for easy deployment
- Strongest-possible security protection using SRTP, TLS and HTTPS with hardware encryption accelerator
- Redundant power supply, support for Hot Standby Clustering & High Availability to minimize system down time (pending)
- Automatic export of previous day's data; periodically cleans up user data

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## UCM6510 Technical Specifications

| Interfaces                               |  |
|--|--|
| Analog Telephone FXS Ports               | 2 RJ11 ports (both with lifeline capability in case of power outage)   |
| PSTN Line FXO Ports                      | 2 RJ11 ports (both with lifeline capability in case of power outage)   |
| T1/E1/J1 Interface                       | 1 RJ45 port  |
| Network Interfaces                       | Dual Gigabit ports (switched or routed) with PoE;<br>A 3rd Gigabit port for Hot-Standby Clustering   |
| NAT Router                               | Yes (user configurable)  |
| Peripheral Ports                         | USB, SD  |
| LED Indicators                           | Power 1/2, PoE, USB, SD, T1/E1/J1, FXS 1/2, FXO 1/2, LAN, WAN, Cluster Heartbeat   |
| LCD Display                              | 128x32 dot matrix graphic LCD with DOWN and OK buttons   |
| Reset Switch                             | Yes, long press for factory reset and short press for reboot   |
| Voice/Video Capabilities                 |  |
| Voice-over-Packet Capabilities           | LEC with NLP Packetized Voice Protocol Unit, 128ms-tail-length carrier grade Line Echo Cancellation,<br>Dynamic Jitter Buffer, Modem detection & auto-switch to G.711  |
| Voice and Fax Codecs                     | G.711 A-law/U-law, G.722, G.723.1 5.3K/6.3K, G.726, G.729A/B, iLBC, GSM, AAL2-G.726-32, ADPCM; T.38  |
| Video Codecs                             | H.264, H.263, H263+  |
| QoS                                      | Layer 3 QoS, Layer 2 QoS   |
| Signaling & Control                      |  |
| DTMF Methods                             | In Audio, RFC2833, and SIP INFO  |
| Digital Signaling                        | PRI, SS7, MFC/R2, RBS (pending)  |
| Provisioning Protocol &<br>Plug-and-Play | TFTP/HTTP/HTTPS, auto-discovery & auto-provisioning of Grandstream IP endpoints via ZeroConfig (DHCP<br>Option 66/multicast SIP SUBSCRIBE/mDNS), eventlist between local and remote trunks   |
| Network Protocols                        | TCP/UDP/IP, RTP/RTCP, ICMP, ARP, DNS, DDNS, DHCP, NTP, TFTP, SSH, HTTP/HTTPS, PPPoE, SIP (RFC3261), STUN, SRTP, TLS, LDAP, HDLC, HDLC-ETH, PPP, Frame Relay (pending)  |
| Disconnect Methods                       | Call Progress Tone, Polarity Reversal, Hook Flash Timing, Loop Current Disconnect, Busy Tone   |
| Security                                 |  |
| Media Encryption                         | SRTP, TLS, HTTPS, SSH  |
| Advanced Defense                         | Fail2ban, alert events, Whitelist, Blacklist, strong password based access control   |
| Physical                                 |  |
| Universal Power Supply                   | Input: 100 ~ 240VAC, 50/60Hz; Output: DC+12V, 1.5A;  |
| Physical                                 | Unit Weight: 2.165 kg; Package Weight: 3.012 kg  |
| Dimensions                               | 440mm(L) x 185mm(W) x 44mm(H)  |
| Environmental                            | Operating: 32 - 113°F / 0 ~ 45°C, Humidity 10 - 90% (non-condensing)<br>Storage: 14 - 140°F / -10 ~ 60°C, Humidity 10 - 90% (non-condensing)   |
| Mounting                                 | Rack mount & Desktop   |
| Additional Features                      |  |
| Multi-Language Support                   | English/Simplified Chinese/Traditional Chinese/Spanish/French/Portuguese/German/Russian/Italian/Polish/Czech<br>for Web UI; Customizable IVR/voice prompts for English, Chinese, British English, German, Spanish, Greek,<br>French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Turkish, Hebrew, Arabic |
| Caller ID                                | Bellcore/Telcordia, ETSI-FSK, ETSI-DTMF, SIN 227 – BT, NTT Japan (pending)   |
| Polarity Reversal/Wink                   | Yes, with enable/disable option upon call establishment and termination  |
| Call Center                              | Multiple configurable call queues, automatic call distribution (ACD) based on agent skills/availability/<br>work-load, in-queue announcement   |
| Customizable Auto Attendant              | Up to 5 layers of IVR (Interactive Voice Response)   |
| Maximum Call Capacity                    | Up to 2000 registered SIP endpoints, up to 200 concurrent calls  |
| Conference Bridges                       | Up to 8 bridges, up to 64 simultaneous conference attendees  |
| Call Features                            | Call park, call forward, call transfer, DND, DISA, ring group, pickup group, blacklist, paging/intercom etc.   |
| Compliance                               | FCC: Part 15 (CFR 47) Class B, Part 68<br>CE: EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1, TBR21, RoHS<br>RCM: AS/NZS CISPR 22, AS/NZS CISPR 24, AS/NZS 60950, AS/ACIF S002<br>ITU-T K.21 (Basic Level); UL 60950 (power adapter)<br>T1: TIA-968-B Section 5.2.4<br>E1: TBR12/TBR13, E1: AS/ACIF |