

# 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 small-to-medium businesses (SMBs) 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 up to 50 SIP trunk accounts
- Gigabit network port(s) with integrated PoE, USB, SD card; integrated NAT router with advanced QoS support
- Hardware DSP based 128ms-tail-length carrier-grade line echo cancellation (LEC), hardware based caller ID/call progress tone and smart automated impedance matching for various countries
- Strong defense against malicious attacks (Fail2ban, Whitelist, Blacklist, alerts, etc.)
- 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, central control panel for endpoints, integrated NTP server, and 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, advanced support for Hot Standby Clustering and High Availability (pending)

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## Technical Specifications

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