

## FE-CUBE-PAS1

PAGING AUDIO ADAPTER AND SCHEDULER FOR TRANSFORMING SIP-CALL TO ANALOG AUDIO SIGNALS

FE-CUBE-PAS1 is SIP to analog audio adapter/gateway. It is able to connect to any SIP-server as standard SIP-client and get a phone call as standard SIP-extension, translate it to analog audio and deliver it to any audio amplifier or active speaker through AUX interface.



Tones and messages can be streamed live or uploaded to device to play them later or periodically from build-in timer/scheduler.

Auto-provisioning option through IP-INTEGRA SIP-server saves time, especially in the case of large-scale installations.

The module can easily be integrated in 3<sup>rd</sup> part SIP-systems through WEB interface. Small size allows to place it physically behind or inside active speakers or behind any audio amplifier.

### *At a first glance*

- Allows integration of analog audio paging systems (active speakers and large amplifiers) with SIP servers
- AUX audio output - can be integrated with all 100V amplifiers and Voice Alarm Systems with Control inputs or VOX-control
- Paging to one speaker or active speaker groups
- Easy upgrade analog public audio (PA) system to SIP/IP PA
- Standard line-out for any amplifier
- Extremely low power requirement and power consumption
- Auxiliary port
- Protocols: G.722, PCM/G711 ULaw, GSM

**Specification****HARDWARE & POWER**

CPU	H2 Quad-Core Cortex A7 H.265/HEVC 1080p
Memory	256 MB DDR3 SDRAM
Onboard Storage	TF Card (max. 32 GB) / SPI Flash
Onboard Networking	1x RJ 45 10/100M Ethernet
Audio Input	MIC Integrated
Power Source	USB OTG able to supply power
Ports	1x USB 2.0 HOST, 1x USB 2.0 OTG
Buttons	Power Button
LED	Power LED & Status LED
Operating Voltage	5V DC
Power Consumption	<0.5 W average

**NETWORKING AND PROTOCOLS**

Protocols	IPv4 (with DiffServ), SIP, TCP, UDP, HTTP, RTP, DHCP, SNMP, NTP
LAN Protocols	Network Access Control (802.1x)
Management and operation	HTTP (Web Configuration) DHCP and Static IP, Remote Software upgrade, Centralized monitoring
SIP Support	RFC3261 (SIP Base Standard), RFC3515 (SIP Refer), RFC2976 (SIP Info), SIP using TLS, RFC5630 SIPS Uri scheme
DTMF Support	RFC2833, 2976 (SIP Info)

**CONSTRUCTION**

Size	48 x 46 mm
Weight	26g

**SOFTWARE**

Web Interface	Dashboard with HTTPS based configuration, alarm settings
Sound Adjustment	Echo Cancellation, Sound Muting, Silence Suppression, Paging Start/Stop Tone, Microphone Boost/Mute
Scheduler	Bulk Adding, Automatic Fill-out, Ringtone upload
Auto-Provisioning	HTTPS, Automatic synchronizing of SIP-server scheduler and sound files
Logging	Calls, Events, and Scheduler Logs



Freund Elektronik A/S, in cooperation with our sister company Freund Elektronika D.O.O. Sarajevo, is developing an IP-Based Intercoms, Audio Systems, Access Control and Smart Home solutions.

As a developer, manufacturer, and reseller, we have been self-improving and perfecting ourselves for over 30 years.

In the industry, we negotiate the most advanced and innovative solutions regarding the building communication. Our daily focus is on the development and user friendliness of our high quality and pleasantly designed products.

As a developer and manufacturer of our own IP-INTEGRA system, we have made a top-of-the-line products for Door Telephony, Public Audio, and Access Control solution.

Our development department, together with our partners, has created elegant and robust door phones, SIP-Centrals, Terminals, IP-Speakers, ACC Controllers, and applications with intelligent features using the most advanced technologies when available, and creating new technologies when they are not while keeping it simple for our customers.

