

PA1+



Power over
Ethernet (PoE)



IPv6 & IPv4



Gigabit
Ethernet



Relay control
interface



Security (TLS
& SRTP)



Plug & Play



HD audio

Snom's SIP-based announcement system

With the Snom PA1+, a SIP PBX can be expanded to become a broadcasting system for HD audio announcements from any Snom SIP phone or to play background music in rooms, corridors and office floors. The integrated 6.5-watt high-performance amplifier can already fill large rooms with sound using existing speakers, but larger PA systems can also be added via the existing connections. Another possible use is the

freely configurable relay contacts, which can be remotely controlled via SIP or DTMF and thus help to integrate existing door opening systems, for example. Additional network components such as LAN cameras can also be connected to the gigabit switch in order to set up or expand a security system. High security standards, such as SHA 2 encryption, are key attributes of the PA1+.

Basics

- Product information
 - Public announcement system
PA1+ | black | PN 00004602, EAN
4260059583886, UPC 811819013880
 - Operating system: Linux
- Placement: Indoor, wall mounting, ceiling mounting

Dimensions and weight

- Dimensions (L × W × H, approx.)
 - 165 mm × 104 mm × 35 mm
 - 175 mm × 104 mm × 35 mm with connectors
- Weight (approx.)
 - 400 g

Indicators and keys

- 2 LED indicators
 - Call status indication: 1 green LED
 - Power status indication: 1 red LED
- 1 dedicated function key: Reset / IP address announcement

Interfaces and connections

- Power options
 - [Power over Ethernet \(PoE\)](#)
 - IEEE 802.3af, class 3 | IEEE 802.3az⁴
 - Power adapter
 - 100 - 240 V AC, 50 - 60 Hz | 5 V DC (SELV),
2 A, 10 W²
- Wired interfaces
 - Power adapter: coaxial power connector (socket) *(5V DC)*
 - Network connectivity: 2 × RJ45-8P8C *(Port 1/2)* sockets → Gigabit Ethernet (GbE)
 - Headset:³ 2 × 3.5 mm miniature audio jack *(Mic-In/Line Out)*
 - Maintenance: RJ12 *(EXT)* socket
 - External speaker: loudspeaker terminal + / - *(Speaker)*

- External keyboard: proprietary 8-pin socket *(KBD)*
- Input / output devices:
 - proprietary 6-pin socket *(I/O1)*
 - proprietary 4-pin socket *(I/O2)*
 - proprietary 2-pin socket *(VDD)*

Audio devices and codecs

- Audio output
 - Amplifier¹
 - 6.5 W, class D
 - Impedance: 8 Ω
 - Line out: 600 Ω
- Audio codecs
 - G.711 (A-law, μ-law), G.722, G.723.1, G.726, G.729, Opus
- Dual-tone multi-frequency signalling (DTMF / RFC2833)
 - SIP-INFO, in-band, out-of-band

Networking technologies and protocols

- VoIP related protocols and techniques
 - [SIP 2.0](#), [SDP](#), [RTP](#), [RTCP](#), RTCP-XR, SIP REFER method (RFC 3515), rport (RFC 3581), [ENUM](#), [ICE](#), [STUN](#)
- Secure VoIP protocols
 - [SIPS \(SIP over TLS\)](#), [SRTP](#), [SRTCP](#)
- Network protocols
 - [ARP](#), [ICMP](#), IPv4 / IPv6 (dual stack), [DNS](#), [DHCP](#), NTP, [LDAP](#), [LLDP-MED](#), HTTP, FTP, [TFTP](#), [L2TP](#)
- Secure network protocols
 - [TLS V1.3](#), HTTPS, [IEEE 802.1X \(EAPoL\)](#)
- Remote management protocols
 - [TR-069](#), TR-069 Annex G (formerly TR-111), [TR-369 \(USP\)](#)
- Network technologies
 - [OpenVPN](#), [VLAN \(IEEE 802.1q\)](#)

User interfaces and setup

- Configuration and setup via menu-driven web user interface (WUI)
- Automatic configuration via provisioning
 - Loading of settings and firmware via HTTP, HTTPS, TFTP
 - Supported DHCP provisioning options 66 / 67
 - [Secure Redirection And Provisioning Service \(SRAPS\)](#) support
 - Plug & Play (PnP) support
 - Secure provisioning with preinstalled certificate
- Localisation
 - [Languages](#)
 - Time zone, dial tone
- Diagnostic
 - SIP / PCAP trace
 - Syslog

Call features

- Outgoing call features
 - [Multicast paging](#)
- Incoming call features
 - Auto answer

Environmental conditions

- Operating ambient temperature
 - 0 °C - +35 °C

- Nonoperating (storage) temperature
 - -10 °C - +45 °C
- Humidity (non-condensing)
 - 5 % - 95 %

Package contents

- Hardware
 - Public announcement system PA1+
 - Wall mount plate, wall mount screws
 - Wire set
- Documentation
 - [Quick Installation Guide](#)
 - [General Public License \(GNU\)](#)

Snom accessories

- Power adapter:² [Snom 10W PSU \(PN 00004570\)](#)
- PoE injector A5E (PN 00004079)



Add-on options

- [External keyboard](#)
- [External speaker](#)¹
- [Input / output devices](#)
- [Amplifier](#)

¹ Loudspeaker not included

² If PoE is not available

³ For installation and maintenance purposes

⁴ Optional via software

Interoperability



Series overview (Special application devices)



PA1+



SP800



E303/E303A

Disclaimer

Further information: [PA1+ webpage](#) | [Snom Service Hub](#) | [Quick Installation Guide](#) | [User manual](#) | [Warranty information](#) | [Type approval](#) | [Company locations](#)

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