

# 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+.

# **Technical specification**



#### **Product variants**



PA1+ | EU & UK | PN 00004602

#### **Basics**

- Product information
  - Public announcement system
  - Colour: black
  - 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

### **Audio devices and codecs**

- Audio output
  - Amplifier<sup>1</sup>
    - 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



PA1+ | Americas | PN 00004603

- Dual-tone multi-frequency signalling (DTMF / RFC2833)
  - SIP-INFO
  - in-band
  - out-of-band

#### Interfaces and connections

- Power options
  - Power over Ethernet (PoE)
    - IEEE 802.3af, class 3 | IEEE 802.3az<sup>4</sup>
  - Power adapter
    - 100 240 V AC, 50 60 Hz | 5 V DC (SELV), 2 A. 10 W<sup>2</sup>
- Wired interfaces
  - Power adapter: coaxial power connector (socket) (5V DC)
  - Network connectivity: 2 × RJ45-8P8C (Port 1/2) sockets → Gigabit Ethernet (GbE)
  - Headset: <sup>3</sup> 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)

#### **Interoperability**

Certified VoIP partner

# **Technical specification**



# Networking technologies and protocols

- Network technologies
  - OpenVPN
- VoIP related protocols and techniques
  - SIP, SDP, RTP
- Secure VoIP protocols
  - SIPS (SIP over TLS), SRTP
- Network protocols
  - IPv4 / IPv6 (dual stack), DHCP, NTP, LDAP, HTTP, FTP, TFTP, L2TP
- Secure network protocols
  - TLS V1.2

# 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
- Localization
  - Languages

- Time zone, dial tone
- Diagnostic
  - SIP / PCAP trace
  - Syslog

#### **Call features**

- Outgoing call features
  - Multicast paging
- Incoming call features
  - Auto answer

# Package contents

- Hardware
  - Public announcement system
  - Wall mount plate, wall mount screws
  - Wire set
- Documentation
  - Quick Installation Guide
  - GNU General Public License
  - Drill template

### Snom accessories and compatible devices

- Power adapter<sup>2</sup>
  - Snom 10W PSU (PN 00004570)
- External keyboard
- External speaker
- Input / output devices
- Amplifier

<sup>&</sup>lt;sup>1</sup> Loudspeaker not included

<sup>&</sup>lt;sup>2</sup> If PoE is not available

 $<sup>^{3}</sup>$  For installation and maintenance purposes

<sup>&</sup>lt;sup>4</sup> Optional via software

# **Technical specification**



#### Disclaimer

Further information: Snom PA1+ webpage | Snom Service Hub | Warranty information | Type approval

Snom, the names of Snom products, and Snom logos are trademarks owned by Snom Technology GmbH. All product specifications are subject to change without notification. Snom Technology GmbH reserves the right to revise and change this document at any time, without being obliged to announce such revisions or changes beforehand or after the fact. Although due care has been taken in the compilation and presentation of the information in this document, the data upon which it is based may have changed in the meantime. Snom therefore disclaims all warranties and liability for the accurateness, completeness, and currentness of the information published, except in the case of intention or gross negligence on the part of Snom or where liability arises due to binding legal provisions.