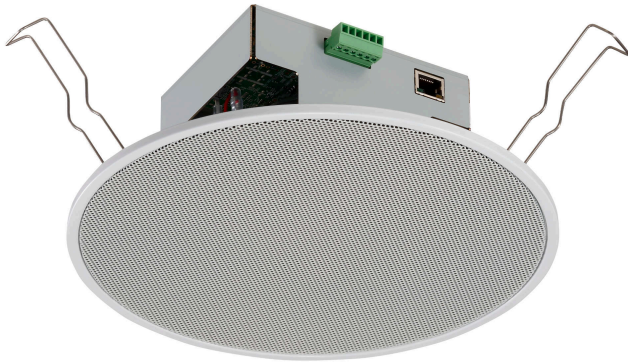# IP-A1PC238

IP CEILING SPEAKER 8W

The IP-A1PC238 is a PoE-powered Ceiling Speaker with a built-in 8 W amplifier and internal data storage for up to 20 audio files. It supports SIP protocol for flexible integrations with VoIP devices, and its 20 multicast ports are available for group paging operations. It can also receive broadcasts from Video Management System using ONVIF. Device control and further system integration is accessed through remote API (HTTP) or local control inputs.

Key features

- 16cm (6") cone-type speaker for in-ceiling installations
- Receive SIP audio, ONVIF and Multicast
- Local broadcast using internal audio files
- 8W built-in amplifier
- 2 control inputs and 1 control output
- HTTP commands (receive)
- Audio file storage (20 files, total 80MB, WAV/MP3)
- Playback programs (Repeat, Weekly Timer)
- PoE powered

Specifications

Power Source	PoE (IEEE802.3af Class 3)
Power Consumption	12.95 W (rated output) 5 W (IEC62368-1)
Amplifier Rated Output	8 W
Sensitivity	94 dB (1 W, 1 m) (500 Hz - 5 kHz, pink noise)
Maximum Sound Pressure Level	103 dB (8 W, 1 m)
Frequency Response	60 Hz - 20 kHz (peak - 20 dB)
Speaker Component	16 cm (6") cone-type
Audio Codec	Opus, PCMU (G.711u), PCMA (G.711a), G.722
Broadcasting Mode	SIP Broadcasting/SIP calling Mode: Opus/PCMU/PCMA/G.722, P2P/SIP Server Connection Multicast Broadcasting Mode: Opus/PCMU/PCMA/G.722 Auto codec recognition, 20 ports VMS Broadcasting Mode: PCMU Internal Message Broadcasting Mode Local Broadcasting Mode: Output from LINE/MIC IN to SPEAKER OUT Note: Each broadcast mode can be assigned an order of priority using the Priority Setting function.
Sound Source Files	Max. 20 files (File storage capacity: 80 MB total) Supported file formats WAV file: 8/16/44.1/48 kHz sampling frequency, 8/16 bit, monaural/stereo MP3 file: 32/44.1/48 kHz sampling frequency, 64 - 320 kbps, CBR/VBR, monaural/stereo Repeat playback: Playcount (1 - 10 times), Duration (5 - 3600 sec) or Timer (from Start time to End time) Interval time: 0 - 60 sec, Delay time: 0 - 30 sec Trigger: Control Input or Remote API (HTTP)
Network I/F	100BASE-TX, Auto MDI/MDI-X, RJ45 connector
Network Protocol	TCP/IP, UDP, HTTP, RTP, RTSP, RTCP, ARP, ICMP, IGMPv3, NTP, SIP (RFC3261)
Control Input	2 channels, no-voltage make contact inputs, open voltage: 5 V DC,short-circuit current: 2 mA or less, removable terminal block (6 pins)
Control Output	1 channel, open collector output, withstand voltage: 30 V DC,control current: 150 mA or less, removable terminal block (6 pins)
Indicator	STATUS (orange), LINK/ACT (green)
Clock Accuracy	±13 seconds per month
Time Adjustment	Manual time setting, Time adjustment by NTP server
Power Outage Protection Period	24 hours (RTC time retention, at 40 °C (104 °F)
Operating Temperature	0 °C to +50 °C (32 °F to 122 °F)
Operating Humidity	90 %RH or less (no condensation)
Dimensions for Fixing Hole	Mounting hole: Ø200 ±2 mm (7.87" ±0.08") Ceiling thickness: 5 - 25 mm (0.2" - 0.98")
Speaker Mounting Method	Spring clamp
Finish	Frame: Steel plate, white (RAL 9016 equivalent), paint Grill: Steel net, white (RAL 9016 equivalent), paint
Dimensions	Ø230 x 89 (D) mm (9.06" x 3.5")
Weight	880 g (1.94 lb.)

Included Accessories	Pattern paper x 1,
	Removable terminal plug (6 pins, preinstalled on the unit) x 1

NOTE: Please do not install the product near heat insulation material, or cover the product with heat insulation or acoustic absorbing materials to prevent fire risk. Please do not install the product in damp or wet locations or areas with high humidity (condensing) as it may cause damage to the product.
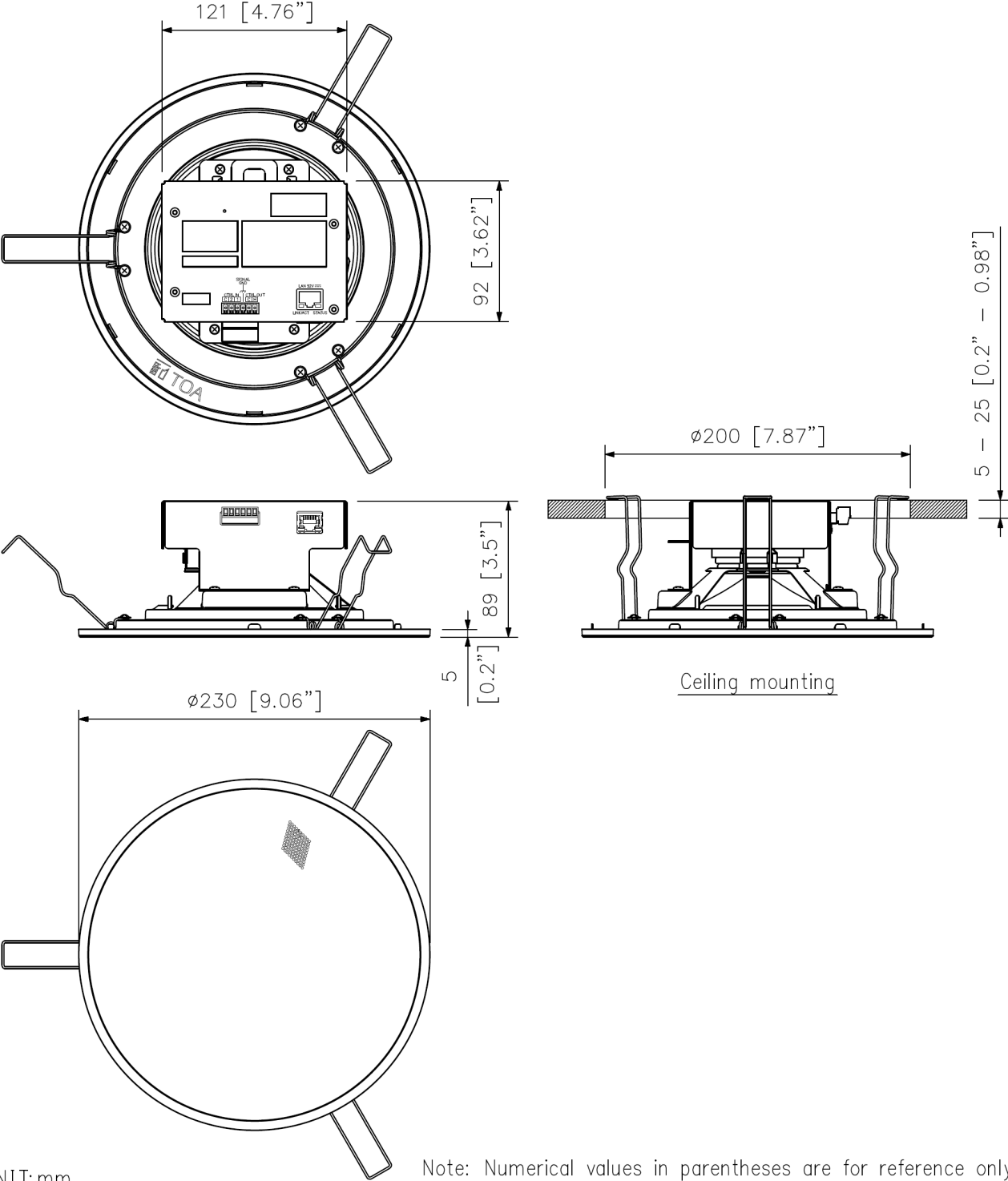*ONVIF is a registered trademark of ONVIF Inc.
*These specifications apply to the firmware version 3.1.0 or later. For the latest specifications and firmware, please refer to the TOA DATA Library (https://www.toa-products.com/international/)

PC requirements

PC Requirements

Display	1920 x 1080 resolution or greater
OS	Windows 10 Pro (64 bit edition)
	Windows 10 Home (64 bit editon)
	Windows 11 Pro
	Windows 11 Home
Web Browser	Google Chrome
	Microsoft Edge

Dimensions

121 [4.76"]

92 [3.62"]

5 – 25 [0.2" – 0.98"]

ø200 [7.87"]

Ceiling mounting

89 [3.5"]

5 [0.2"]

ø230 [9.06"]

UNIT:mm

Note: Numerical values in parentheses are for reference only.

TOA

A&E specifications

The IP ceiling mount loudspeaker shall be of an in-ceiling type design, with a full lightweight metal construction with no visible fixings and a discreet outer bezel of only 5 mm. Installation shall be via pre-mounted springs allowing it to be mounted quickly and easily into ceilings with a thickness of between 5 – 25 mm (0.2" – 0.98").The IP ceiling mount loudspeaker shall be SIP compatible to broadcast clear and intelligible VoIP messages via a single network cable and shall support various standard network protocols and forums such as ONVIF (Open Network Video Interface Forum) and shall be able to complement VMS (Video Management System) and other audio network integration systems. Twenty multi-cast ports shall be available for group paging.The IP ceiling mount loudspeaker shall have the facility of storing up to twenty audio files with the code of WAV or MP3 format internally. The device shall have the flexibility of broadcasting these files at predetermined times by setting the start and end time along with the day(s) of the week or repeated when necessary and triggered from a control input, or remote API (HTTP). There shall be two controlled inputs and one controlled output. The IP ceiling mount loudspeaker shall be capable of being muted by TOA IP-A1PG Paging Gateway as the highest priority operation.Remote settings of the IP ceiling mount loudspeaker shall be achieved by connection to a Windows® based personal computer and by using the PC's browser, operational settings, functions and system status can be established.There shall be an internal class-D amplifier capable of producing up to 8 watts of power.The loudspeaker shall incorporate a single 16 cm (6") full-range cone-type transducer with a smooth frequency response of 60 Hz to 20 kHz measured on axis with a Sound Pressure Level (SPL) of 94dB measured at 1 metre with a power input of 1 watt or 103dB with a power input of 8 watts measured at 1 metre. The power source shall be supplied from a PoE switching hub.The dimensions shall be Ø230 × 89 mm (d) (9.06" x 3.5") weighing 880 g (1.94 lbs).The finish of the loudspeaker shall be: Baffle: steel plate, white (RAL 9016 equivalent). Grille: Steel net, white (RAL 9016 or equivalent). Mounting bracket: steel plate.
Manufacturer: TOA CorporationModel: IP-A1PC238