

# BARIX

## Annuncicom 155

Industrial, ruggedized device with dual Ethernet supervised Mic/Speaker and control interface, rail certification.



With an amplified output suitable to drive 5W into an overhead paging or panel speaker, a sensitive microphone input, selector/contact closure inputs and control output the device is equally suitable for paging, intercom, help point and monitoring applications.

A built-in switch provides two 10/100Mbps network interfaces allowing the daisy chaining of devices.

The supported codecs (PCM/uLaw/aLaw/MP3) and range of sample rates (8..48kHz) allow the optimization of the audio quality for the several applications, even in higher quality.

The Annuncicom 155, the device can operate as a streaming receiver for background music with priority messaging, as a paging or inter-com device within a Paging/Intercom system or as a digital message repeater. With the Barix SIP firmware, the device can operate as part of an IP telephony solution, for example, as an intercom panel in parking barriers, toll gates, as a SOS help point, call box etc.

Being fully EN50155 and GL “Brücke” compliant, the device fulfills the stringent requirements to be used in trains, cars, ships and industrial as well as outdoor installations, it is designed for harsh environments (IP65).

### Applications

- Generic VoIP Intercom and Paging Device with speaker amplifier
- Voice Evacuation Systems
- Microphone Encoder for IP Audio
- Surveillance
- Help Point/SOS call box device
- Live IP Audio Encoder for Streaming Applications
- SIP and IP Paging Zone device
- IP65 rating, tested to EN50155, suitable for applications in rolling stock

### Features

- MP3, G711, PCM Encoding and Decoding
- Audio Level Supervision with SNMP Trap
- IP Streaming via HTTP, UDP, RTP, Multicast
- Microphone Input
- Line Level Output
- Amplified Output 5W (8 Ohm)
- Contact Closure Input (2)
- RS-485 Serial Port (1)
- Wide operating temperature range (-40..+70°C)
- shock and vibration resistant, IP65 rated



For commercial related questions (distributors contacts, price list, business opportunities) please contact: [sales@barix.com](mailto:sales@barix.com)



For technical inquiries (problem reports, request for documentation, etc.) please contact: [support@barix.com](mailto:support@barix.com)

# Technical Specifications

## Electrical

- 24 to 48 VDC  $\pm$  30%, <60 V, 14 Watt max.
- M12 "A" connector (male)

## Ethernet

- 2x 10/100Mbps auto, MDI/MDI-X, Link & Activity LEDs per interface, Internal switch
- Protocols: TCP/IP, UDP, RTP, SIP, DHCP
- M12 "D" connector (female)

## RS-485

- 300..230'400 Baud asynchronous, 7/8 bit
- +12V, 100mA, fused supply output to external devices
- M12 "A" connector (female)

## Speaker out

- 5.0 Watt RMS max @ 8 Ohm
- Values @ 8 Ohm: Freq. response 10 Hz .. 15 kHz (-3dB),
- Dynamic range 82dB, SNR -82dB, THD <0.1%(-3dBFS)\*
- Output level software controllable

## Line out

- max. 11 dBm @ 600 Ohm, max. 12 dBu (FS), unloaded
- Output impedance 40..45 Ohm, 14 mWatt max
- Values @ 600 Ohm: Freq. response 20 Hz .. 20 kHz (-3dB)
- Dynamic range 80dB, SNR -80dB, THD <0.15% (-3dBFS)\*
- Output level software controllable

## Microphone in

- Electret mic, supervised bias power (2.4..4 VDC)
- Frequency response 50Hz ..20kHz (-3dB)\*
- Dynamic range 70dB, SNR -70dB, THD <0.05% (-3dBFS)\*
- input sensitivity software controllable

## Audio formats

- MP3, encoding/decoding up to 192/320kbps
- PCM 16bit @8, 16, 22.05, 24, 32, 44.1, 48 kHz
- G.711, uLaw, aLaw (sample rates same as PCM)

## Discrete I/O

- 2 fully supervised inputs
- 1 LED driver output, current limited
- internal temperature sensor
- 2 status LEDs (red/green)

## Panel interface

- Sub-D 15 connector, all audio and I/O signals

## Mechanical

- Aluminum case, 460 g, with mounting wings
- Min. mounting space incl. plugs (W x D x H) 230 x 138 x 47 mm (9 x 5.43 x 1.85 inch)
- Dimensions (W x D x H) 130 x 108 x 38 mm (5.12 x 4.25 x 1.5 inch)

## MTBF

- Calculated acc. to MIL217F at 40 °C  
Min. 80 000h at "ground mobile" environment  
Min. 225 000h at "ground fix" environment
- calculation 110 000h (according to IEC62380 at max.85°C)

\* depends on used codec, best results @48kHz PCM

## Environmental

### Operating Environment

-40 to +70°C / -40 to 158°F  
0 - 95% relative humidity, non-condensing

### Storage Conditions

40 to +85°C / -40 to 185°F  
0 - 95% relative humidity, non-condensing

## Certifications

CE, RoHS, others in examination

### Emissions

according to EN 55022, GL "Brücke", EN 501555

### Environmental

according to EN 50155

### Immunity

acc. to EN 55024, EN 50121, EN 6100-6-2, EN 50155

### Product Safety

according to EN 60590

## Ordering Information

2010.9098 Annunicom 155

Device only. Power supply and mating connectors are offered separately as the accessory kit, below

2010.9099 Annunicom 155 Accessory Kit contains

- 24V power supply with M12 "A" connector
- Sub-D 15 connector for Panel interface
- M12 "A" connector for RS.485 interface
- M12 "D" to RJ45 ethernet cable

## Barix AG

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