BARIX

ANNUNCICOM 155

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

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 application. Up to CD/Hifi quality can be achieved.

The Annuncicom 155, the device can operate as a streaming receiver for background music with priority messaging, as a paging or intercom 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.

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
- Generic, bidirectional full-duplex VoIP module for Paging and Intercom applications
- Digital Annunciator, Message Player, Message Repeater
- SIP and IP Paging Zone Device

Features

- MP3, G711, PCM Encoding and Decoding
- Audio Level Supervision with SNMP Trap generation
- IP Streaming via TCP, UDP, RTP, Multicast
- Microphone Input
- Line Level Output
- Amplified Output 5W (8 Ohm)
- Contact Closure Input (2)
- RS-485 Serial Port (1)
- Supply Voltage (18..28V)
- Dual Ethernet
- Supervised Speaker/Mic and Control Interface
- IP65 rating, tested to EN50155, suitable for applications in rolling stock
- Wide operating temperature range (-40..+70‘C), shock and vibration resistant
- Current sourcing Outputs (1)

Technical Specifications

Electrical
- 24 to 48 VDC ± 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)

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

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

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/compliant with

RoHS, FCC, CE, C-Tick, UL (planned)

Emissions
according to EN 55022,
GL “Brücke”, EN 50155

Immunity
acc. to EN 55024, EN 50121,
EN 61000-6-2, EN 50155

Environmental
according to EN 50155

Product Safety
according to EN 60590

Ordering Information

2010.9098 Annuncicom 155
Device only. Power supply and mating connectors are offered separately as the accessory kit, below

2010.9099 Annuncicom 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

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

For technical inquiries (problem reports, request for documentation, etc) please contact **support@barix.com**

Barix AG – Seefeldstrasse 303 – CH-8008 Zurich – info@barix.com – www.barix.com
Phone: +41 43 43322 11 – Fax: +41 44 2742849