

Product Specifications

SIP Public Announcement Adapter with PoE

VPA-100

Version 1.0

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Change History:

Revision	Date	Author	Change List
Version 1.0	3/1/2016	Anthony Chen	Initial release

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1. PRODUCT DESCRIPTION



New audio control system

The VPA-100 is an audio control system with existing IP PBX. It provides unidirectional and bidirectional audio for broadcasting.

An announcement via VPA-100 is simply by a call from an IP phone with its handset, headset, or hand free mode. An efficient 3.5 Watt amplifier provides loud speaker coverage for the entire room or floor space.

User friendly controlling

The VPA-100 provides four programmable output ports to control power on or power off, it usually control them via web. When IP phone dial to VPA-100 that user also can controls these ports via keypad of IP phone. It allows user any time any where control these devices.

Standard Compliance

Compliant with the Session Initiation Protocol 2.0 (RFC 3261), the VPA-100 is able to function with other PLANET and any third-party VoIP products.

Future design for each application

There are two power supply of VPA-100: power adapter and PoE. User select available power source with work around. To control volume of output, speaker input and handset input via web UI. User can modify up voice if noise fill all environment. VPA-100 provides different audio interface for announce voice: 3.5mm audio interface and loud speaker. It can setup multiple positions, like as rooms, hallways, and office floors.

Fully VoIP Communication

Several VPA-100 can be connected to each other via the switch. The individual network cables can be up to 100 meters long. If IP PBX supports paging and intercom that one IP phone can call many VPA-100 in same time. They can be optionally installed on walls or ceilings.

2. PRODUCT FEATURES

➤ **Highlights**

- Supports SIP 2.0 (RFC3261)
- IEEE 802.3af Power over Ethernet compliant
- Dual power supply (DC 5V/DC 3.3V)
- Four programmable output ports
- Audio output for position: 3.5mm and loud speaker

➤ **Advantageous Applications**

- Echo cancellation
- Full duplex and speaker mode
- Noise suppression
- Adaptive Jitter Buffer
- Extra LAN port connect other devices for network expanding

➤ **SIP Applications**

- Auto answer
- Paging and intercom
- Voice algorithms: G.711 (A-law and μ -law), G.722, G.722.1, G.722.2, G.723, G.726, G.729, iLBC

➤ **Call Control Features**

- Volume Adjustment
- Audio Output Mode: Speaker and Handset
- Incoming Ring
- Full-duplex

➤ **Network Features**

- Static IP and DHCP client on WAN
- Main DNS server

➤ **Maintenance and Management**

- Integrated web server provides web-based administration and configuration
- Firmware upgrade via HTTP

3. SPECIFICATIONS

3.1 MAIN COMPONENTS

CPU/DSP	Micrel KS8382Q (Flash 8M)
SDRAM	32MB
Flash	16MB

3.2 FUNCTIONAL SPECIFICATIONS

Product	VPA-100 SIP Public Announcement Adapter with PoE
Hardware	
Voice	Microphone: 3.5mm standard interface Speaker: 3.5mm standard interface Loud speaker: SPK+, SPK-
Physical Interfaces	Two 10/100BASE-TX RJ45 Ethernet port (IEEE 802.3) LAN1: Connect to internet and provides PoE function LAN2: Connect other devices for network expanding Microphone/speaker: 3.5mm connector Terminal block for loud speaker, power supply, ground and output ports 5V power supply: Max. 200mA 3.3V power supply: Max. 500mA Port1-4 output current: 8mA
Protocols and Standard	
Voice Flood	Protocol: UDP Voice algorithms: - G.711 (A-law and μ -law) - G.722/G.722.1/G.722.2 - G.723 - G.726 - G.729 - iLBC Echo cancellation noise suppression Adaptive Jitter Buffer
Features	
Telephony Features	One voice line Auto Answer Volume Adjustment: output, handset input and speaker input Full-duplex Incoming Ring Audio Output Mode: Speaker and Handset
Environment	
Power Requirements	5V DC, 1A IEEE 802.3af PoE class 3 Max. 2W
Operating Temperature	0 ~ 40 degrees C
Operating Humidity	10 ~ 95% (non-condensing)
Weight	344g
Dimensions (W x D x H)	117 x 84 x 31 mm
Emission	CE, FCC
Connectors	Two 10/100BASE-TX RJ45 Ethernet ports Two 3.5mm phone connectors DC power jack Terminal block

3.3 PHYSICAL SPECIFICATIONS

➤ **Dimensions**

Dimensions (W x D x H)	117 x 84 x 31 mm
Net weight (without package)	344g

➤ **Rear View and Panel Descriptions**



➤ **Interface Descriptions**

Interface		Description
1	LAN1	Connect to internet and provides PoE function
2	LAN2	Connect other devices for network expanding
3	DC 5V	Power port
4	Audio in	Connects to microphone
5	Audio out	Connects to speaker
6	SPK+	Connects to "+" loud speaker
7	SPK-	Connects to "-" loud speaker
8	3.3V	Power supply 3.3V for devices, max. 500mA
9	5V	Power supply 5V for devices, max. 200mA
10	GND	Ground
11	1,2,3,4	Output port, output current 8mA

➤ **LED/button Descriptions**

Interface		Description
1	SYS	This LED flashing when power on 40~50 seconds.
2	RST	Press button 10 seconds continuously to reset default

3.4 ENVIRONMENTAL SPECIFICATIONS

OPERATING

Temperature:	0~40°C
Relative Humidity:	10~95% (non-condensing)

STORAGE

Temperature:	-40~70°C
Relative Humidity:	10~95% (non-condensing)

3.5 ELECTRICAL SPECIFICATIONS

Input Voltage:	5V DC, 1 A
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3.6 REGULATORY COMPLIANCE

FCC, CE

3.7 RELIABILITY

MTBF >87,600Hrs @25 degrees C MIL-STD-781C

3.8 BASIC PACKAGING

- VPA-100 x 1
- Quick Installation Guide x 1

3.9 PACKAGE INFORMATION

Dimensions (W x D x H)	283 x 147 x 65 mm
Weight	515g (gross weight)
Carton Dimensions (W x D x H)	345 x 320 x 310 mm
Carton Weight	5.15kg (gross weight)
Carton Unit	10pcs

APPENDIX A: Default Setting

Default WAN IP	172.16.0.1
Default Subnet Mask	255.255.0.0
Default Gateway	172.16.0.254
Default Login User Name	admin
Default Login Password	123