

# Sipura IP Telephones

# SPA-841

2 or 4 Line Business Phone



### High Quality, Inexpensive Endpoints Drive Deployment of VoIP Services

The widespread deployment of business grade, high quality and affordable VoIP telephony endpoints has enabled service providers and system integrators to gain a competitive advantage over legacy operators. Lower capital and operational expenditure and the availability of exceptional feature sets enable revenue generating services with satisfied customers.

Sipura Technology designs, develops and manufactures VoIP endpoint solutions that are internationally known for their advanced implementation of standards based telephony with mass deployment capability. Sipura has proven that superior products and dedicated technical support can be delivered at competitive price points, thus helping service providers realize rapid payback on CPE investment. The SPA-841 business phone is the first in an IP telephone product line from Sipura Technology that leverages the global success of Sipura and the rapid adoption of VoIP technology in worldwide VoIP deployments.

### The Sipura SPA-841 Is Ideal for Hosted VolP and IP PBX Applications

Communication is the lifeblood of world business. VoIP technology is revolutionizing the telecommunications industry whereby small, medium and large businesses are deploying IP telephone systems to reduce the cost of operations and increase productivity of workers.

The Sipura SPA-841 IP telephone can be configured as a two (2) line or via a simple software upgrade, a four (4) line, full featured business phone with pixel based graphical display, speakerphone and head-set port. Stylish and functional in design, the SPA-841 can be used in residential, SOHO, enterprise and small to medium business service offerings including IP PBX, hosted IP telephony and IP Centrex. The SPA-841 leverages Sipura's market leading technology and manufacturing proficiency to deliver an upgradeable, high quality IP telephone unparalleled in value and support.

### Interoperability and SIP Based Feature Set

Experienced telephony service network operators recognize that technical acumen coupled with responsive pre and post sales support are critical for a successful deployment. Sipura's extensive interoperability track record with VoIP industry infrastructure leaders via standards based and platform specific SIP signaling enable network providers to quickly roll-out competitive, feature rich service offerings.

Armed with a mature feature set with hundreds of programmable parameters, the SPA-841 utilizes the call processing functionality found in existing Sipura products. Sipura VoIP endpoint solutions solve many time-to-market requirements of enterprise users and leverage the advantages of an IP network like easy acceptance of station moves, presence and shared line appearances across geographically separate locations.

# Highlights

### The SPA-841 Telephone Functions:

- Up to Four (4) Lines with Independent Configuration / Registration - The SPA-841 ships with two (2) lines enabled. A two (2) line upgrade is available via a software license key installed locally using the SPA-841 web interface or remotely via a secure profile update.
- · Pixel Based Display
  - Line Status Active Line Indication, Name/Number
- Digits Dialed with Number Auto-Completion
- Called Number with Directory Name Matching
- Calling Number with Name Directory Matching or via Caller ID
- Subsequent Incoming Calls with Calling Name and Number
- Date and Time with Intelligent Daylight Savings Support
- Call Duration with Call Time Stamp Stored in Call Logs - Name/Identity (Text) Display at Start Up
- Shared Line Appearance Support \*\*
- · Hands Free Operation
- Call Hold with Music on Hold Support \*\*
- Call Waiting
- · Call Transfer Attended & Blind
- · Call Conferencing
- Do Not Disturb · Call Back on Busy
- · Anonymous and Selective\* Call Blocking
- Call Forwarding Unconditional, No Answer, On Busy
- · Hot Line + Warm Line Automatic Calling
- · URI (IP) Dialing Support
- On Hook Default Audio Configuration (Hands Free / Headset)
- Call Logs: Made, Answered, Missed Calls with Call Time 60 Entries Each
- · Caller-ID Name + Number
- · Outbound Caller-ID Blocking
- · Multiple Ring Tones with Selectable Default Ring Tone per Line
- Distinctive Ringing Based on Calling and Called\* Number
- User Downloadable Ring Tones 2
- Ring Tone Formation and Download Tool Free from www.sipura.com
- Download On Demand Ring Tones 10
- Personal Directory with Auto-Dial 100 Entries
- · Speed Dialing Support
- · Configurable Dial / Numbering Plan Support Per Line
- DNS SRV and Multiple A Records for Proxy Lookup and Proxy Redundancy
- · Syslog, Debug, Report Generation and Event Logging
- · SecureCall Encrypted Voice Communication Support
- Build in Web Server for Admin and Config with Multiple Security Levels
- Automated Provisioning Multiple Schemes Up to 256 Byte Encryption:
- TFTP DHCP Option 66 Support HTTP HTTPS

## **SPA-841 Hardware Features:**

- Pixel Based 128 by 48 Monochrome LCD Graphical Display
- Four (4) Call Appearance/Line Buttons with Associated Tricolor LED
- · Line LED State Indication Active, Idle, On Hold, Unregistered
- Line LED Configurable to 13 Different States (On/Off, Color, Flash)
- Speaker On/Off Button with Associated Tricolor LED
- Headset On/Off Button with Associated Tricolor LED
- Mute Button with Associated Tricolor LED
- · Message Waiting Indicator LED
- Voice Mail Message Retrieval Button
- Hold Button
- · Menu Driven User Interface Buttons
- Two (2) Soft Key Buttons & Button for "Additional" Menus / Items
- "i" Button for Access to Feature, Set-up & Configuration Menus
- Up and Down Menu Navigation Buttons
- Volume Control Button Handset, Headset, Speaker, Ringer
- Standard 12-Button Dialing Pad
- · High Quality Handset and Cradle
- · Built-In High Quality Microphone and Speaker
- Headset Jack 2.5mm
- Ethernet LAN 10BaseT RJ-45
- 5V DC Universal (100-240 Volt) Switching Power Adaptor
- LED Test Function

### Carrier Grade Security, Provisioning and Management

Sipura's leadership in architecting secure provisioning solutions with detailed performance and troubleshooting features enable network providers to deliver high quality support to their subscribers. Professional training and comprehensive documentation provide the tools necessary to design solutions and solve issues quickly. These benefits are bundled together into SipuraCARE support packages available to enterprises, system integrators, distributors and carriers.

# SPA-841

This data sheet is preliminary Subject to change without notice.





# Technical Specifications

Note: Many specifications are programmable within a defined range or list of options.

Please see the SPA Administration Guide for details.

The target configuration profile is uploaded to the SPA-841 at the time of provisioning.

Data Networking:

MAC Address (IEEE 802.3)

IPv4 - Internet Protocol Version 4 (RFC 791) upgradeable to v6 (RFC 1883)

ARP - Address Resolution Protocol

DNS - A Record (RFC 1706), SRV Record (RFC 2782)

DHCP Client – Dynamic Host Configuration Protocol (RFC 2131) ICMP – Internet Control Message Protocol (RFC792)

TCP - Transmission Control Protocol (RFC793)

UDP – User Datagram Protocol (RFC768) RTP – Real Time Protocol (RFC 1889) (RFC 1890) RTCP – Real Time Control Protocol (RFC 1889)

DiffServ (RFC 2475), Type of Service – TOS (RFC 791/1349) 802.1p/q – Layer 2 QoS \* SNTP – Simple Network Time Protocol (RFC 2030)

### Voice Over IP:

SIPv2 – Session Initiation Protocol Version 2 (RFC 3261, 3262, 3263, 3264) SIP Proxy Redundancy – Dynamic via DNS SRV, A Records Re-registration with Primary SIP Proxy Server

SIP Support in Network Address Translation Networks - NAT (incl. STUN) Secure (Encrypted) Calling via Pre-Standard Implementation of Secure RTP

Codec Name Assignment

Voice Algorithms:

- G.711 (A-law and mu-law)

- G.726 (16/24/32/40 kbps)
- G.729 À

- G.723.1 (6.3 kbps, 5.3 kbps)

Dynamic Payload Support

Adjustable Audio Frames Per Packet

DTMF: In-band & Out-of-Band (RFC 2833) (SIP INFO)

Flexible Dial Plan Support with Configurable Inter-Digit Timers

IP Address / URI Dialing Support

Call Progress Tone Generation
Jitter Buffer – Adaptive
Frame Loss Concealment
VAD – Voice Activity Detection w/ Silence Suppression
Attenuation / Gain Adjustments
MWI – Message Waiting Indicator Tones
VMWI – Via NOTIFY, SUBSCRIBE
Caller ID Support (Name & Number)

Caller ID Support (Name & Number)

Password Protected System Reset to Factory Default and Configuration Password Protected Admin and User Access Authority Provisioning/Configuration/Authentication:

- HTTPS with Factory Installed Client Certificate - HTTP Digest - Encrypted Authentication via MD5 (RFC 1321)
- Up to 256-bit Encryption

# Provisioning, Administration and Maintenance:

Per Line and Purpose Configurable Syslog and Debug Options

Web Browser Administration and Maintenance:
Web Browser Administration and Configuration via Integral Web Server
Automated Provisioning & Upgrade via HTTPS, HTTP, TFTP
Asynchronous Notification of Upgrade Availability via NOTIFY
Non-Intrusive, In-Service Upgrades
Report Generation and Event Logging Syslog and Debug Server Records

### Physical Data Interfaces:

One RJ-45 Port - Ethernet 10baseT Interface (IEEE 802.3)

### Voice I/O Interfaces:

Handset: RJ-7 Connector

Speakerphone & Microphone - Built-in

Headset 2.5mm Port

Regulatory Compliance: FCC Part 15 Class A, B (Pending / In-process)

CE Mark (Pending / In-process)

Power Supply: Switching Type with Modular Wall Plug Clip - Country/Region Specific

DC Input Voltage: +5 VDC at 2.0 A Max.

Power Consumption: 5 WATTs

Power Adapter: 100-240v - 50-60Hz (26-34VA) AC Input, 1.8m cord

### Indicator LEDs - Lights:

Line (4) Speakerphone

Headset

Message Waiting Mute + Status (Provision, Alert, Upgrade)

### Environmental:

Operating Temperature: 41 to 113° F (5 to 45° C) Storage Temperature: -13 to 185° F (-25 to 85° C)

Relative Humidity: 10 to 90% non-condensing, operating and non-operating

**Unit Dimensions (Approx):** 195mm x 170mm x 75mm (7.7in x 6.7in x 3.0in) Desktop or Wall Mountable

### Box Dimensions / Weight:

20.5cm x 22.0cm x 8.0cm (8.0in x 8.7in x 3.1in) / 1,050g (2.31 lbs)

## Box Contents:

- 1 Sipura IP Phone Color: Black 1 Handset Color: Black
- 1 Hardset Cord 56cm (22in) Over 1.8m (6 ft) uncurled Color: Black 1 Dual Mode: Telephone Stand / Wall Mount Bracket Color: Black 1 5v Power Adapter 1.8m (3 ft) Cord Color: Black 1 RJ-45 Ethernet Cable 1.8m (3 ft) Cord Color: Black

- Physical Customization:

Customer Logo / Branding Available Case Color Matching Available

## Shipping Carton (10 Pieces) Dimensions / Weight:

47.0cm x 42.5cm x 22.5cm (18.5in x 16.7in x 8.9in) / 11.7kg (25.8lbs)

### Documentation:

Quick-Start Guide

User Guide

Administration Guide - Available to Service Providers Only Provisioning Guide - Available to Service Providers Only

Warranty: One Year Hardware - Limited

- \* Future Support Planned
- \*\* Service feature availability is call feature server platform dependent.

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