PIKA WARP Appliance for Linux / Asterisk®/Open Source

Datasheet

PIKA WARP Appliance is ideal for developers of all kinds looking for a small, low cost computer replacement to deploy telephony applications in the Small Office/Home Office (SOHO) and Small/Medium Enterprises (SME) markets. Completely customizable, it is compatible with VoIP phones as well as analog sets. Unlike your typical computer or appliance, PIKA has covered all your customer's traditional telephony requirements. Music on Hold (MOH) and Paging can be cumbersome to add to a data centric solution as is power failure transfer (PFT), but all are included in the PIKA appliance. The configuration of the appliance is modular and can include up to 9 ports of a combination of FXO/FXS/BRI/ plus VoIP stations and trunks. The appliance is designed to address businesses with up to 75 IP endpoints (trunks and stations) and 32 simultaneous calls.

Features & Benefits

- AMCC Power PC 440EP Embedded 533 MHz Processor
  - 1200 mips
  - Supports floating point and MMU (memory management unit)
- Internal flash 256 MB NAND (OS + apps) plus 4 MB NOR memory (uboot)
- Internal RAM 256 MB
- External removable 1 GB SD flash memory (no hard drive improves reliability)
  - for additional voice mail prompts / storage
  - back-up of configuration files and custom settings (facilitates unit replacement)
- 10/100BT Ethernet port
- One USB host port (v1.1)
- One FXS port with every unit
- Optional Expansion Modules (max 2): 4-port FXS station, 4-port FXO trunk, 2-port/ 4-channel BRI modules and 2-port GSM
- Each 4-port analog module also contains a power failure transfer jack (RJ-11)
- Audio in, Audio out jacks for music-on-hold and paging functions
- 40 character (2 x 20) LCD backlit display with scroll button (API controlled) inverts for wall mounting
- Power LED
- Reset function remotely controlled
- External brick-format universal power supply with country variant cords
- Surface standalone/stackable or wall mountable to accommodate any space requirements
- Customizable look so you can promote your brand!
- Dynamic thermal management (Fan)
- RS232 programming port

Software

Full suite of PIKA voice processing applications	tone detection and generation
	play/record
	VoIP
	conferencing
	echo cancellation
Pre-loaded with Linux OS, drivers and tools	2.6.x Linux kernel *(stripped down PIKA version)*
SSH (remote access)	Dropbear
Asterisk and Asterisk GUI	1.4.x
Database, web server, web language, common tools	Busybox 1.8.2 *(binaries linux tools such as ssh, wget)*
	SQlite3 *(database)*
	Httpd *(webserver)*
	PHP5 with support for SQLite, XML, PDO, etc.
	NTP, DHCP *(client)*, TFTP *(server and client)*, \VLAN, DNS
Ability to add any software package that your application requires	
PIKA Warp Community for 3rd party apps	www.pikawarp.org

Technical Specifications

Physical Properties

Dimensions (Metric)	234mm W x 169mm D x 55mm H
Dimensions (Imperial)	9.25" W x 6.65" D x 2.18"H

Power Requirements

Input Voltage	AC 110V-240V (50-60 Hz)
Max Input Power	25W

Environment Requirements

Operating Temperature	0 °C to +40 °C
Storage Temperature	-20 °C to +85 °C
Humidity, Non-condensing	5% to 95%
Mean Time Between Failure (MTBF)	Base board with no modules = 30.6 years
	Base board with 2 modules (FXO/FXS) = 19.1 years
	Power Supply = 20.44 years

Telephony Interfaces

Standard station ports	1 FXS
Expansion Modules	2
Expansion Module Types	4 FXS/ station (+PFT), 4 FXO/ trunk (+PFT), 2-port/ 4-channel BRI

FXO AC Impedance (in audio band)

Off-Hook	programmable
On-Hook Metallic (Tip to Ring)	>300 k ohms
Return Loss	>26.8 dB

FXO DC Current

Loop Current Range	13 - 110 mA

FXO DC Resistance

Longitudinal (tip to ground, ring to ground)	>9.8 M ohms
On-Hook Metallic (Tip to Ring)	>6.5 M ohms
Off-Hook Metallic (Tip to Ring)	310 ohms @ 20mA
	117 ohms @ 100 mA

FXS AC Impedance (in audio band)

Off-Hook	600 ohms or TBR21 complex impedance
Return Loss	>30 dB

FXS DC Feed

Open Loop Voltage	48V
Constant Loop Current	20 mA
Max Loop Length**	4kft

FXS Ringer Equivalence Number Supported

REN	1

Regulatory Approvals

North American telecoms and safety	(FCC/DOC/UL/CSA)
European Union	(CE)
RoHS Compliant	
Others upon request	

Technical Support

Technical Support Specialists trained on Asterisk®
Support methods available to suit your needs: onsite assistance, email, phone, forum

PIKA Custom Engineering

Team of highly skilled application design engineers
Custom designed features and media processing applications
Access to testing facilities

About PIKA Technologies Inc.

For over 2 decades, PIKA Technologies has been providing developers with the tools they need to build advanced voice and fax applications like IP PBX, fax broadcast and self-service IVR. As the technology landscape has changed, so too has PIKA, building out its product offering so its customers can choose the right tool set for their applications. Whether building applications using DSP board-based media processing, host-based solutions, or OPEN Source platforms such as Asterisk, whether your application requires telephony boards or appliances, application developers of all kinds turn to PIKA for their development tools.

More Info

For detailed technical specifications go to www.pikatechnologies.com.