



OPTICOM LSX-01

Video and Audio Broadcast Quality Streaming Server

PRODUCT SPECIFICATION SHEET

- Broadcast Quality Streaming of Any Video Feed via Internet or Intranet
- Complete Audio/Video Streaming System
- True Real Time Viewing - No Buffering
- Linux-based PC/Server Technology
- Proprietary Compression Algorithm
- Easily Embedded into Existing Websites or Emails
- No Need for Additional Software Plug-Ins or Media Player
- Scalable Original Image Size (320 x 240)
- Up to 100 Simultaneous Users with No Frame Rate Loss
- Compatible with Cross O/S Platforms Including MS and Mac
- Real Time Audio/Video Provides Video Conferencing via Internet



Introduction

Opticom Technologies LSX-01 is a broadcast quality streaming audio/video server. With Broadband Technology becoming a dominant force in the marketplace, it is important to make sure that users are able to utilize technology like the LSX-01. Because the LiveCam video stream is actually Live, and the applet is delivered concurrently with the stream, the LiveCam video stream can be utilized in unique ways currently unachievable with traditional streaming systems.

The LiveCam operates on cross platform, all makes of PC's and Apple/Mac computers can accept and view the stream. Live video and audio can be e-mailed to opt-in mailing lists, allowing the user to see video right from their Eudora or Outlook Express mail program. The LiveCam can be used as a powerful marketing tool as the stream can be integrated into hundreds of banner ads across the web to increase click-throughs and regular site visits.

The LiveCam will support hundreds of simultaneous users with no video or audio loss. The "real-time" aspect also allows for web based "interactivity" on a new level: Remote control devices, mass Internet marketing, and videoconferencing are just a few examples.

Description

The LSX-01 is a Broadcast quality Video and Audio Streaming Server. It is a UNIX Based PC (rack-mount) Server geared to deliver REAL-TIME high quality audio and video over the Internet. The LiveCam is directed specifically at the broadband market, while still serving the shrinking 56k modem user market. The LiveCam digitizes and transmits crisp video and audio, using any video source, (i.e. TV, VCR, Camera), and can be added to any website as simply as adding a graphic or an image.

At the heart and brains of the LSX-01 solution is a highly efficient compression algorithm that significantly improves video transmission. LSX-01 produces larger original images (320x240 pixels) of better visual quality than competing products. These images are scaleable to larger sizes and refresh at up to six to eight frames per second when used with a cable modem. In addition to superior image quality, LSX-01 is a unique product, enabling true live streaming video because it does not use a buffer that would cause a few seconds delay in viewing. LSX-01 also increases the user's potential audience for Internet video broadcasts due to its user-friendliness: browser-based viewing requires no download or setup; and the optional non-browser player downloads in seconds and requires no installation.

PART NUMBER

LSX-01

Video Streaming has been generally considered a daunting prospect, in complexity and cost. The LSX-01 is a proprietary technology, which empowers the user with the ability to deploy top quality Video-Net-casting capabilities with a minimum of expense and effort in one stand-alone system.

Engineer and Architect Specifications

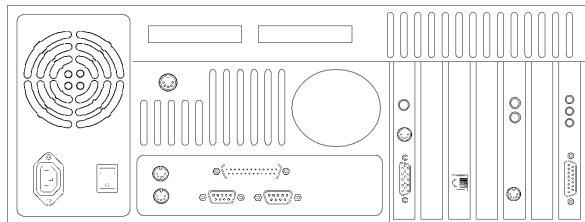
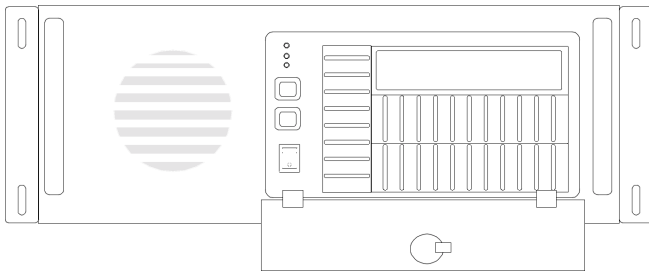
A network accessible video stream shall be provided by a broadcast quality internet audio and video server, Opticom Model LSX-01. The server unit shall be compatible with TCP/IP, PPP, and HTTP protocols. The central processor shall be 500 MHz minimum and installed memory shall include 2 MB of flash memory and 128 MB of SDRAM.

The unit shall accept any external video feed and be compatible with NTSC video format. The server shall be capable of transmitting video at a maximum of 15 FPS and supporting up to 200 simultaneous users. 24 bit true color image resolution shall be a maximum of 320 x 240 pixels in NTSC format.

The unit shall be equipped with one RJ-45 10 Base-T ethernet port and for network communication. Video input shall be one RCA type connectors while audio input shall be one 3.5 mm miniature headphone jack.

The unit shall be designed to operate on 110-120 VAC/200-240 VAC power.

Schematic Diagram



Technical Specifications

Network Protocol:	TCP/IP, PPP & HTTP
Network Connection:	Ethernet 10 BaseT (RJ45 Connector)
Cross Platform Compatibility:	MAC, PC or UNIX Stations Equipped with IE 4.0/ Netscape 6.0 or Higher; Embedded Stream is Compatible with Eudora & Outlook Email and Banner Ads
Operating System:	Free BSD
Processor:	AMD K6II - 500MHz
Flash Memory:	2 MB ROM (Firmware)
System Memory:	128 MB SDRAM
Web Server:	Built In
Video Format:	NTSC
Video Compression:	Proprietary M-JPEG
Audio Compression:	Modified GSM
Frame Rate:	15 FPS Max.
Image Resolution: (NTSC)	320 x 240 Max. (24 Bit True Color)
Analog Video Input:	1 x RCA Connector
Video Output:	1 x DB-15 VGA Port
Audio Input:	1 x 3.5MM Phono Jack
Typical Bandwidth:	100 KBPS Per Stream
Simultaneous Users:	200 Maximum - Can be Extended to 4,000 by Adding <i>Afterburner</i> Server
Front Panel Display:	Power Indicator and Status LED's
Power Requirements:	110-120 VAC/220-240 VAC Switching
Power Consumption:	150 Watts
Operating Temperatures:	32° to 113° F 0° to 45° C
Weight:	Net: 40.8 lbs/18.5 kg Gross: 43.4 lbs/19.7 kg
Dimensions (W x D x L):	18.7" x 7.0" x 22.0" 475 x 178 x 559 mm
Color:	Black

Ordering Information

Part Number	Description
LSX-01	High Speed Video and Audio Streaming Server