eSONA®100

MROTEK™
Access Every Network

Intelligent Wire-speed Bandwidth Manager

The **eSONA®100** is a wire-speed bandwidth Manager providing robust QoS enforcement across LAN and WAN segments. The **eSONA®100** with its revolutionary design and Custom SOC architecture provides interface bandwidth shaping, QOS and compression. With capability to address QoS using traffic classification at L2-L3-L4 layers, **eSONA®100** delivers absolute guaranteed bandwidth on per class basis.

Key Features

- Auto MDI-I/MDI-X on 10/100 Mbps Ethernet Port (RJ- 45)
- 10/100BASE-T or 100BASE-FX for WAN
- Ethernet bandwidth provisioning upto100Mbps, 1Kbps step
- Upto 88 bidirectional queues using layer L2-L4 based classification for bandwidth management
- Traffic Classification based on TCP/UDP port, IP Address, IP Range, IP Subnet, VLAN tag and MAC Address
- Time of Day / Day of week implementations for Policies
- Class specific statistics available
- Metering information on the actual bandwidth consumed
- CLI, SNMP and Telnet based access for easy management
- Dual firmware support
- Simple Backup and Restoration of configuration

Management Features

- SNMP v1/v2 based management
- LITEview Manager - Web based NMS
- Remote Management of Central and Remote units from NMS

Description

eSONA®100's custom SOC based architecture enhances performance, provides reliability with low power consumption and delivers absolute bandwidth for mission critical applications.

The **eSONA®100** has two Fast Ethernet ports. 10/100BASE-T for LAN & 10/100 BASE-T or 100 BASE-FX for WAN. These options make **eSONA®100** seamlessly integrate with any network infrastructure.

Asymmetric and Symmetric bandwidth shaping capability at wire speed performance upto 100 Mbps makes **eSONA®100** an ideal choice for Bandwidth Management.

eSONA®100's dual firmware support provides flexibility in configuration & redundancy for device bootup.

The **eSONA®100** can be locally or remotely managed using Console, Telnet, SNMP or using the advanced LITEview Manager.

eSONA®100 supports Bandwidth Management using upto 88 bidirectional queues using L2-L3-L4 type traffic classification. The traffic classification can be based on IP Address, IP Subnet, TCP/UDP port, VLAN tag and MAC address.

Time of day feature enables scheduling of policies without affecting the user productivity. This enables implementation of different policies during the day suiting various application needs.
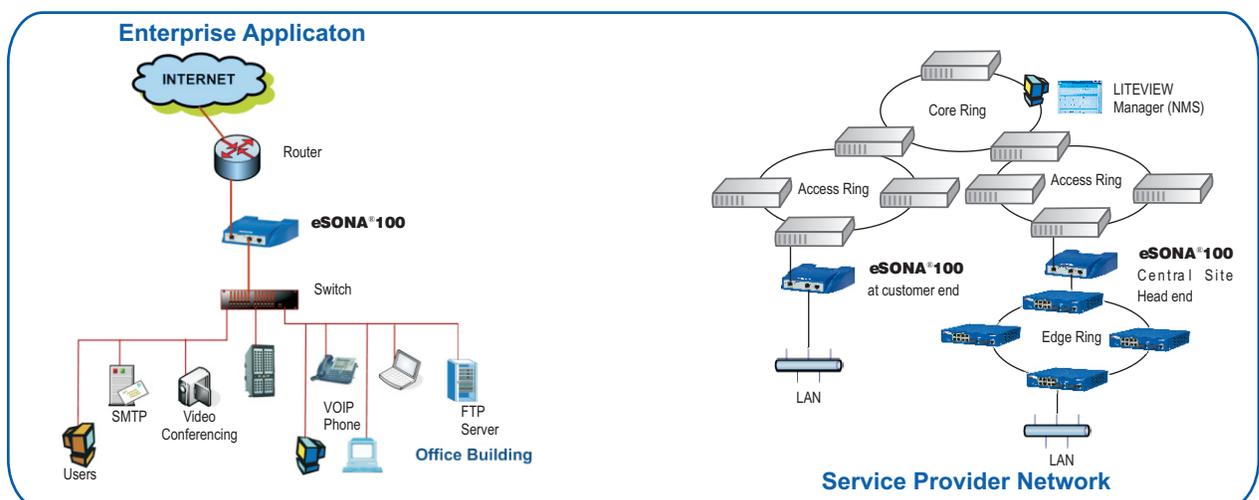
Real time Metering information provides the actual consumption of bandwidth. This information is vital to study the enterprise traffic pattern and also enables Service Providers to charge customers on usage basis.

LITEVIEW Manager - a Web based NMS for managing **eSONA®100** in an enterprise application. The actual bandwidth consumption per class can be monitored graphically using LITEview Manager.

Application

The **eSONA®100** is an intelligent Bandwidth Manager ideally suited for SME networks, Carriers/Service Providers and Metro Ethernet operators. With its custom SOC based architecture, Bandwidth Management/QOS is assured at wire speed performance. The **eSONA®100** provides absolute guaranteed bandwidth per user to deliver Bandwidth Management and network optimization with improved performance for business critical applications.

eSONA®100 is an ideal Bandwidth Management device for Enterprises & is suited best as an Ethernet CPE for

Enterprise Applicaton

INTERNET

Router

eSONA®100

Switch

SMTP — Video Conferencing — VOIP Phone — FTP Server

Users

Office Building

Core Ring

LITEVIEW Manager (NMS)

Access Ring — Access Ring

eSONA®100 at customer end

eSONA®100 Central Site Head end

Edge Ring

LAN

LAN

Service Provider Network

LITEVIEW - Centralised Policy Manager

LITEVIEW Manager is an advanced Linux based centralized policy manager providing centralized configuration, management and monitoring for **eSONA®100** devices deployed across the Enterprise/Service Provider network. The simplified GUI enables effortless deployment of **eSONA®100**'s in the network.

Simplified Configuration

LITEVIEW Manager enables configuration of **eSONA®100** from a centralized location assuring rapid/easy deployment in an Enterprise or Service Provider network.

Simplified Management

LITEVIEW Manager enables management tasks of **eSONA®100** devices. The management tasks include deploying QoS for improving and optimizing the application performance over the network. The powerful GUI enables

- Creating traffic classification
- Assigning the bandwidth limits for each class and policies
- Applying policies for efficient bandwidth management

Simplified Monitoring

LITEVIEW Manager captures the metering and statistical information from **eSONA®100** and processes the raw Information to plot a graph. The graphs depict the exact usage of bandwidth per class over a period of time, thus providing powerful reporting procedure for bandwidth consumption on a per class basis. The centralized monitoring makes it even more effective and easier for the IT manager to study and assign the right policies to manage and optimize the application performance.

Minimum System Requirements : Red Hat Linux 9.0, Server Class Configuration with Pentium Xeon Processor.

Conditions for Traffic Classification

Statistics Report

Technical Specifications

- **Standard Compliance :**
  IEEE 802.3u, 10/100BASE-T

- **LAN :**
  10/100BASE-T port
  Shielded RJ-45
  Half/Full Duplex support
  Auto MDI-I / MDI-X

- **WAN :**
  10/100BASE-T port
  Shielded RJ-45
  Half/Full Duplex support
  Auto MDI-I / MDI-X
  OR
  100BASE-FX port
  SC Connector

- **Management :**
  RJ-45 Console Port
  SNMP v1/v2, Telnet,
  FTP server for software upload,
  LITEview Manager (optional)

- **Operating Temperature :**
  0°– 50°C / 32°– 122°F

- **Humidity :**
  10% to 90%, non-condensing

- **Power :**
  90V to 270 V AC, 10 W
  -36V to -72 V DC, 10 W

- **Physical Dimensions :**
  6.14 x 6.06 x 1.69 in

- **Certifications :**
  EMI/EMC : EN 55022,
  EN 55024
  Safety : EN 60950
  UL 60950 - 1
  CAN/CSA C22.2 # 60950-1-03
  FCC Part 15 Class B

Fibre optic specifications

Module Type	Wavelength (nm)	Fiber Type (µm)	Typical Tx Power (dBm)	Typical Rx Sensitivity (dBm)	Typical Range (Kms)
SM15	1310	9/125 Single mode	-12	-29	15

Ordering eSONA®100

	eSONA100/Advanced/SA/@/#/?/~		**Bandwidth Manager**
	eSONA100-MNG		**LITEVIEW Manager Software for eSONA 100**
	eSONA100 Node License		**Management Node license per device**
@	**Tx-Tx** for 10/100BASE-TX for LAN and WAN		
	Tx-Fx for 10/100BASE-TX for LAN and 100BASE-FX for WAN		
#	**SM15** for SM fiber 15Km	?	**SC** for SC connector
		~	**AC** for AC supply
			DC for DC supply

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