

## Ventura

### FCS193-AEMS

# Advanced Element Management System

This AEMS element manager provides remote monitoring and configuration functionality for the Ventura series chassis. The AEMS card enables you to monitor and configure all Ventura video transport cards in a chassis using a built in Web-based interface or the industry-standard SNMP protocol.

The Web-based interface provides an updated snapshot of the chassis with the status of each front panel LED, allowing the viewing or configuration of each card. AEMS also lists the alarms for each card or the entire chassis, and offers a highly configurable handling of alarms at the element management level.

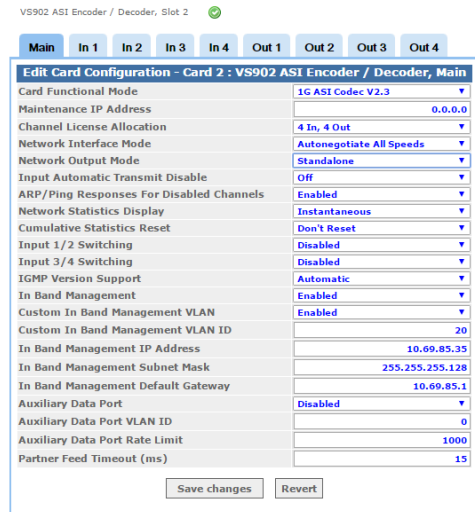
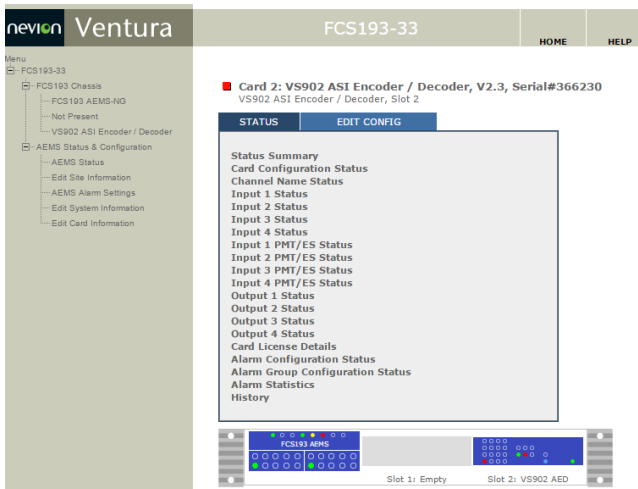
The SNMP interface provided by AEMS integrates with existing SNMP management solutions. AEMS sends notifications to the SNMP manager if alarm situations occur that require corrective action.

### Applications

- Professional broadcast contribution
- Studio-to-studio media exchange
- Live sports and event contribution
- Managed video services over IP

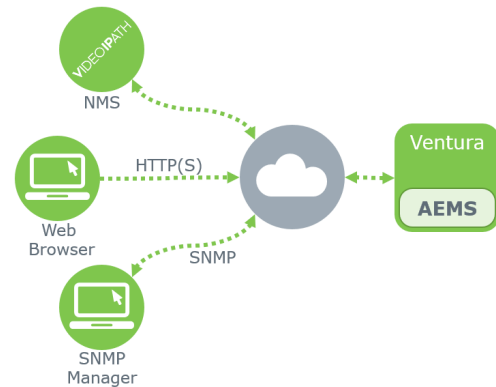
### Key features

- Web browser interface, including chassis display with LED status
- Remote monitoring and configuration of Ventura line cards - reduces operational costs
- Configurable alarm handling including severity, grouping and filtering
- Identifies issues quickly and logs events for future analysis
- SNMP agent for Network Management Systems
- Remote firmware upgrade of Ventura line cards
- Secure communication with AEMS through SSH, SFTP, HTTPS and SNMPv3. Linux iptables firewall included to provide additional security.



## Features

- Automatic recognition of Ventura line cards; supports full fault and configuration management out-of-box
- User definable alarm priorities with 7 levels (from Disabled to Critical)
- Date time stamped history and data recording in Flash memory
- Chassis environment reporting using temperature and fan speed sensor (LED indicators)
- Safe transfer of firmware to Ventura line cards (starts using new firmware after validation)
- Supports authentication and privacy using SSL
- Powerful Linux based system with 32-bit dual core ARM processor and 1GB DDR3 RAM



The FCS193-AEMS is unobtrusive in installing or uninstalling and acts automatically as soon as a new card is inserted in one of the slots in the shelf. AEMS will auto-detect Ventura line cards inserted into the chassis and is both backward and forward compatible in supporting different Ventura line cards with different firmware versions.

The FCS193-AEMS can be used in the VS101-2H and VS103 chassis. The AEMS card will automatically detect the chassis type and display the graphical user interface accordingly.

### FCS193-AEMS as SNMP agent

A single FCS193-AEMS acts as the proxy agent for up to 9 Ventura line cards and monitors the chassis status including power supplies, temperature and fan status. AEMS can be configured to send alarm notifications as traps or informs to up to five notification destinations. AEMS supports SNMP v2c and v3.

### Element management

The Ventura AEMS shelf element manager, FCS193-AEMS, provides a comprehensive set of status, control and alarm variables through a Web interface. The FCS193-AEMS is a powerful Linux based embedded management system that also supports SNMP and XML.

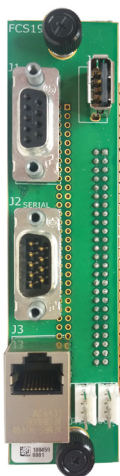
The Ventura line cards firmware can be remotely upgraded from the AEMS card. FCS193-AEMS supports communications to the cards via Ethernet, providing fast upgrades for the newer Ventura line cards (VS902 / VS906 / VS909).

Card communication via I2C bus is available for backwards compatibility with existing cards. AEMS will transparently select between Ethernet or I2C communications, depending on availability. FCS193-AEMS is capable of upgrading all cards in the chassis simultaneously.

### Front panel



### Back panel VS103



### Back panel VS101-2H



### LED indicators

PWR	Power status
ECG	Device status
FAIL	FCS193-AEMS alarm status
LINK	Ethernet link status
ACT	Ethernet activity status
SHEL	Line cards alarm status
PSU	Power supply unit status
FAN	Fan status

### Physical and environmental

FCS193-AEMS card resides in a single slot of a Ventura series chassis.	
Voltage	5V provided by chassis power supply
Power consumption	4W max
Operating temp	0°C/32°F to 50°C/122°F
Storage temp	-40°C/-40°F to 85°C/185°F
Relative humidity	5% to 85%
Compliance	CE and RoHS.

### Connector types

<b>Ethernet</b>	
Connector	RJ45 10/100/1000 Mbps
<b>RS232 / EIA232</b>	
For Linux system configuration	
Connector	DB9 (male)
No. of connectors	1
Baud rate	115200, 1 stop bit, 8 data bits, no parity
<b>GPIO</b>	
To interface Ventura chassis with user's equipment	
Connector	DB9 connector with 8 user configurable GPIO pins. Only available in VS103 chassis

### Protocols

SSH	Remote Linux system configuration
FTP/SFTP	Firmware downloads
HTTP/HTTPS	Web browser access
SNMP	Network management using GETS/SETS. Alarm notifications using traps or informs. Support for SNMP v2c and v3
RADIUS	Centralized user authentication.

### Ordering options

FCS193-AEMS	Advanced Element Management System card for the VS103 chassis
FCS193-AEMS-2H	Advanced Element Management System card for the VS101-2H chassis



## CONTACT INFORMATION

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