![Vela logo]

VELA LUNA

Compliance Monitoring Multiviewer & Smart Logger System

24/7 proxy capture solution with live multiviewer, QoS monitoring, logging, alerting and Transport Stream analytics

KEY FEATURES

Single Input Support

24/7 Monitoring and Logging

24/7 Proxy Capture

Local Multiviewer/Video Wall

Remote Access via Web or Mobile App

User Configurable Alerts and Alarms

Email, Text and SNMP Alerts

Microsoft Teams, WebEx Teams, Slack, Teams Integration

Transcoding

Live Stream Editing

Cloud Services Integration

A comprehensive solution that enables broadcast television stations to create, distribute and monetize their content while fully meeting their regulatory and advertiser compliance requirements.

Compliance Monitoring & Logging

Monitor transport stream parameters per ETSI TR101.290 and ATSC A/78, with 24x7 monitoring and logging of Loudness/LKFS per ATSC A/85 CALM Act, 24x7 monitoring and logging of 608 and 708 closed captioning, PSIP logging and loss of PSIP detection, black screen detection, loss of audio detection, static image and ratings watermark detection and SCTE 104/35 detection, decoding, and logging with configurable alarms and thresholds on each parameter within each stream.

Capture & Recording

Fully selectable proxy configuration including resolution and bitrate. Choose what is best for your quality and user experience needs. The stream is transcoded into a low res proxy for easy playback, review, segmenting, and download through a web browser.

Live Editor Workflow

Create clips in real-time from live broadcasts. HTML5 compliance means this can be done from anywhere in the world (work, home, etc) with any web browser without the need to download and install any browser plugins.

Single Input Support for a Multitude of Input Types

Inputs options from baseband (SDI, HD-SDI, UHD, Composite, HDMI) to TS (ASI, DVB, ATSC 1.0, ATSC 3.0) to IP (UDP, IGMPv3, SMPTE 2022, SMPTE 2110) to Over the Top Platforms (HLS, MPEG-DASH, vMVPD capture).

Choose the Platform that Best Fits Your Needs

Luna comes as a Turnkey system, can run on a virtual Machine, or as a hosted cloud solution.

Multiviewer & Penalty Box

Monitor critical parameters at any point in the distribution chain from IRD/encoder to network to edge and set top box.

Measurements for:

Closed Captioning

XDS Data

SCTE 35/104

Nielsen Audio Watermarks

LKFS Measurements

ETSI TR101.290

Signal Lost

Black/Static Image

PSIP

PROGRAM FEATURES

Multiviewing Features

Live/Realtime local multiviewer. Browser based HLS multiviewing options. Dedicated Multiviewing app (desktop and mobile) supporting multiviewing from anywhere.

Monitoring

Configure thresholds for audio amplitude levels, audio LKFS values, closed captioning, MPEG data, black frames, static image, PSIP data, SCTE 104/35 and Nielsen data.

Automatic Alerts

Automatically send alerts via email, SMS text, SNMP traps or notifications using collaboration tools like MS Teams, WebEx Teams, Slack, or WhatsApp to operators, engineers, and managers when monitored parameters exceed thresholds.

Searchable Database

Easily searchable database to recall alerts, alarms, Closed Captioning text, Loudness measurements, PSIP, and Nielsen information. Search by channel, date, time, program name, and keyword text.

Integration

Connect to and administer on a network with an easily integrated and managed Windows 10/11 Professional 64 Bit platform. Easily configure email settings and transfer files to other work stations or NAS. Field upgradable.

Clipping & Exporting

Use the browser-based editor to export content. Overlay metadata important to your clients on the video such as the date and time aired, closed captioning, program name, or custom text. Easily share content using email, OneDrive, or shareable links.

Construct multi ad clips, add bumpers, slates and inter clip effects such as fade in/out and crossfades.

Video As Run Files

Easily create and edit video log files for compliance and advertising verification. Overlay and burn in various parameters such as Date and Time, Closed Captioning and logos. Add bumpers and slates to clips and use editing tools such as fade in/out and cross fade.

Compliance

Provide proof of Closed Captioning, LKFS, and PSIP compliance using log files, graphs, and snapshot tools provided by the Vela monitoring system.

Alarms Logging

Create a daily log of the pass/fail state of all monitored parameters with all events date and time stamped.

Closed Captioning Logging

Log date and time stamped decoded 608, 608 embedded, and 708 Closed Captioning for proof of compliance and record keeping. As in all other logs, the Closed Captioning logs are organized by date for quick and easy retrieval of data.

LKFS Logging

Log date and time stamped instantaneous, momentary, true peak, and user defined average LKFS measurements. Logs are organized by date allowing for easy retrieval of data when necessary.

Graphs

Easily graph LKFS values using the exported log file CSV format in the spreadsheet application of your choice. Insert upper limits to quickly and efficiently demonstrate compliance in a graphical format.

PRODUCT SPECIFICATIONS

DVB-ASI	Full 213 DVB-ASI Receiver. Signalling rate is full 270 Mbps
IP	(2 or 4) x 1 Gbps Ethernet 10 Gbps Ethernet available (optional) SMPTE 2022 Multicast
RF	8VSB Option for more tuners available. QAM: ClearQAM / Cablecard
Baseband	Video: UHD (4k)/HD/ SD SDI HDMI Component / Composite / S-Video Audio: SDI/HDMI Embedded Analog TRS, RCA
Video	SD/HD/UHD/4K MPEG2, H264, H265 4K: Up to 60 fps 1080i/P: Up to 60 fps 720P: 50, 59.94 480i/486i: 29.97 576i/582i: 25
Audio	Up to 32 channels of audio per video program in 7.1, 5.1, and 2 channel format combinations
Video Wall	HDMI and Display Port

SYSTEM SPECIFICATIONS

Chassis	1RU
Gross Weight	19 lbs
Storage	Solid State Drive for maximum reliability
Power Supply	100-240VAC 50/60Hz auto range rated at 250 Watts
OS	Windows 10/11 Pro (64 bit) OS

ALERT COMMUNICATIONS

Local	Alarm LEDs Audible Alarms Penalty Box GPIO Option
Remote	SNMP Traps Email Text/SMS Messaging Slack Microsoft Teams WebEx Teams Push Notifications

TRANSCODING/ENCODING

H265	HD/SD/UHD/4K Up to 60 fps
H264	HD/SD/UHD/4K Up to 60 fps AVC-Intra Class 50, Class 100 support. Options for Apple devices, Social Media and mobile devices
MPEG2	HD/SD/UHD/4K Up to 60 fps Simple, Main, High and 4:2:2 Profile CBR/VBR Bitrate Modes
Audio	SMPTE 302 PCM AAC LC/HE MPEG 1 Layer 2 MP3
Containers	MPEG2 TS, MOV, MP4

MEASUREMENTS

ATSC	A/78
ETSI TR 101.290	Level 1, Level 2, Level 3
Video	Black Image Static Image DVB Subtitles SCTE 27 CC608 CC708 PSIP
Audio	Amplitude Loss of Audio Program/Channel Loudness per BT.1770-3 ATSC A/85 Calm Act
Bitrate	Total TS Bitrate Video Bitrate Audio Bitrate
XDS	Loss of XDS Data
EAS	Decode and Log EAS Send alert on receipt of EAS
Nielsen	No Nielsen Data Incorrect SID CBET/CQoE
SCTE 35/104	Loss of SCTE Data Type of SCTE Data Log SCTE Triggers/Events