

## VB288 OBJECTIVE QoE CONTENT EXTRACTOR

The VB288 performs objective video and audio monitoring of MPEG-2, h.264/MPEG-4 and h.265/HEVC streams and offers a unique web browser based remote video-wall capability providing full visual status from anywhere. The VB288 enables operators to inspect massive amounts of content services beyond human eyeball capability with dependable alarming on objective parameters having QoE impact.



VB288 CONTENT EXTRACTOR is installed on off-the-shelf server hardware and offers content alarming and mosaic view through any web browser.

In addition to provide automated Objective QoE of large amounts of services, the VB288 CONTENT EXTRACTOR offers thumbnail and metadata extraction and alarming for up to 100 TV multicast streams concurrently. The VB288 CONTENT EXTRACTOR with its RVW (Remote Video Wall) capability is ideal for visual at-a-glance monitoring in the NOC, VOC, head-end or remotely via any standard web browser.

The VB288 CONTENT EXTRACTOR is typically inserted before scrambling insertion in the head-end and the extracted metadata and decoded imagery is fed to the VideoBridge Controller.



Figure - VB288 is typically deployed in the master head-end prior to encryption.

Disruption of descrambling services is one of the main causes for service production disruptions in the head-end, and for the first time cost-effective monitoring of scrambling is available.

Further applications are in middleware scenarios for generating channel mosaics or for extracting channel metadata such as picture resolution, video bandwidth or wide screen signalling information.

Each VB288 CONTENT EXTRACTOR runs an HTTP server with the client as a web browser, so there is no need to install custom software on computers needing access to the measurement data.

The VB288 CONTENT EXTRACTOR ships as software-only and runs on any standard server that meets the minimum specifications.

### FEATURES INCLUDE

- RVW - Remote Video Wall support for 4 screens with up to 16 slots (channels or widgets) on each screen
- Condensed mosaic thumbnail view of all services monitored
- IP multicast support and Over-the-top/Adaptive-Bitrate-Streaming support
- Thumbnail extraction and content alarming on up to 100 services per VB288 installation
  - Scrambling Expected alarming
  - Scrambling Not Expected alarming
  - Freeze-frame Detected alarming
  - Color freeze Detected alarming
  - Audio silence detected alarming
  - No data on video PID detected alarming
  - Transport Stream Continuity Counter errors detected
  - No Transport Stream sync alarming
  - Wrong DAR alarming
  - Wrong PAR alarming
  - Missing custom video PID
- Continuous monitoring of audio level for audio level compliance monitoring
- Loudness support and Lufs metering in RVW according to ITU 1770, ATSC A/85 and EBU R128
- Display of audio level bars and other meta data in RVW view
- Full VBC integration with visual service alarms, live alarms and live user configurable Graphics
- Multicast protocol formats: nTS/UDP, nTS/RTP/UDP n=[1:7] (ETSI TS 102 034)
- OTT/ABR protocol formats: Apple HLS and Adobe HDS
- Custom video PID definition for non-PSI streams
- Visual alarm icons for standard errors in thumbnail views and RVW views
- Easy configuration process for changing which services are shown on video wall
- Searchable alarm lists
- SNMP TRAP alarm forwarding to up to 3 unique destinations
- NTP Time synchronization support

### TECHNOLOGIES

Eri Loudness

### RELATED PRODUCTS


VBC

### MINIMUM SERVER CONFIGURATION

OS Red Hat Enterprise 7  
 2 x 6 core 2.0 GHz CPUs  
 32GB DDR SDRAM  
 2 x 1TB HDD  
 2 x 1GB Ethernet NIC



- XML-based configuration storage and retrieval
- Software-based solution running on standard server hardware
- Web-based client access through CHROME web browser
- Dual GigE interface support for separate DATA and MANAGEMENT ports
- Easy installation through kickstarter image

 **PRODUCT ORDERING CODE**

VB288 Content extractor and Objective QoE Analyser for up to 100 channels with Remote VideoWall - sw only