

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. In addition to providing 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.



Technologies

Bridge Technologies options are designed to enhance the overall ability and performance of accurate monitoring in the broadcast environment

Click below to learn more about compatible technology options:

[Eii™](#) [OTT](#)

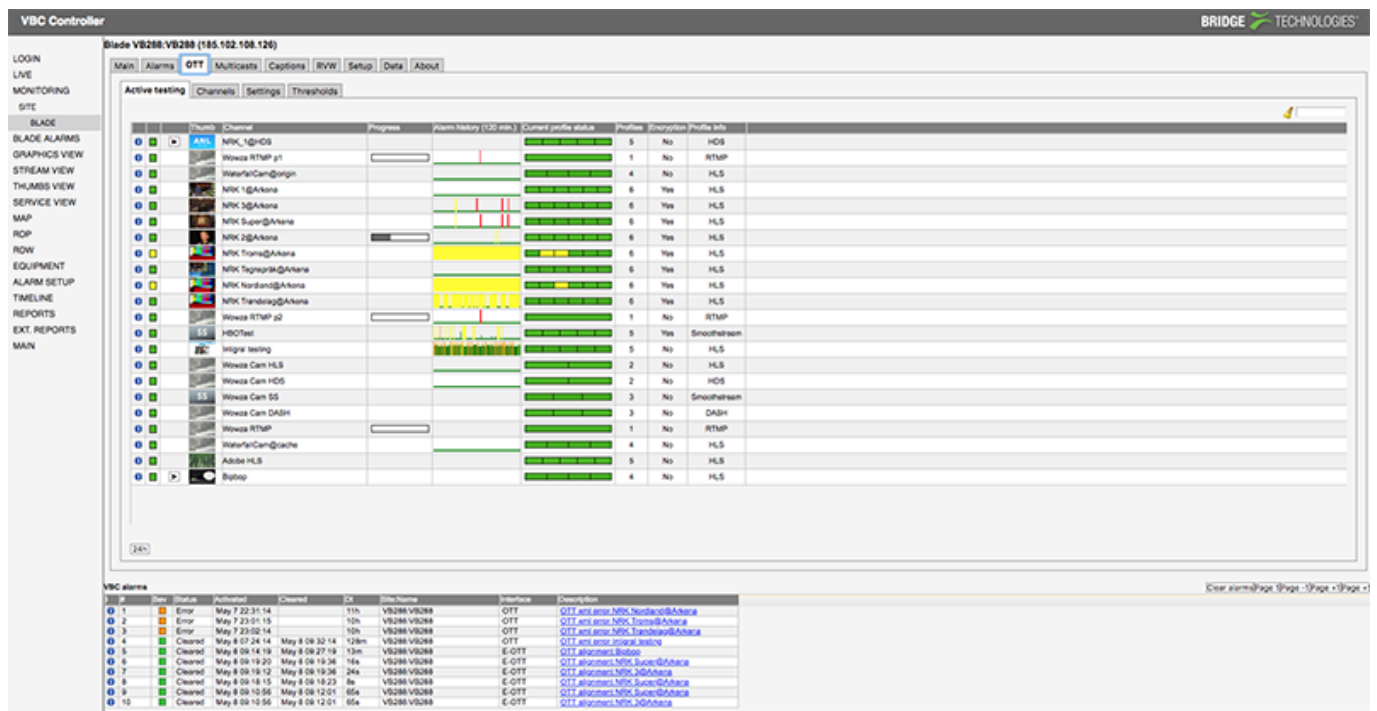
Environmental

[Euroenvironment](#) [RoHS](#) [WEEE](#)

Overview

The VB288 CONTENT EXTRACTOR with its 4 mosaic video walls, 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. 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. The VB288 can optionally have the same OTT Engine analysis as probes, including post-CDN tokens and MPEG-DASH.



Closed Captioning option is also available with live captioning view, future proof raw binary stream storage, archive support for proof of compliance format. CEA-608 (NTSC), CEA-708(DTVCC), SCTE-20 from MPEG2 and H.264 are supported.

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.

VBC Controller BRIDGE TECHNOLOGIES™

Blade VB288:VB288 (185.102.108.126)

Main Alarms OTT **Multicasts** Captions RVW Setup Data About

Thumbnails Join Streams Ethernet thresh. Service thresh.

Joined multicasts

Thumb	Name	Address	#Services
	TVNorge HD	239.255.0.4:5500	1
	Bloomberg Europe TV	239.255.0.17:5500	1
	Nat Geo HD (N)	239.255.0.8:5500	1
	Discovery World	239.255.0.223:5500	1
	CNBC Europe	239.255.0.20:5500	1
	Discovery Science	239.255.0.38:5500	1
	TVP Polonia	239.255.0.44:5500	0
	CTV AP	239.255.0.45:5500	0
	Marjaayat	239.255.0.53:5500	0
	Ai Karma TV-ME	239.255.0.51:5500	0
	Juwelo	239.255.0.55:5500	0
	Al Jazeera Channel	239.255.0.59:5500	1

Export...

VBC alarms Clear alarms Page 1 Page -1 Page +1 Page +5

#	Sev	Status	Activated	Cleared	DI	Site/Name	Interface	Description
1	Error	Activated	May 8 13:44:17		61s	VB288-VB288	E-OTT	OTT alignment Biebob
2	Error	Activated	May 8 12:17:15		88m	VB288-VB288	OTT	OTT xml error NRK.Nordland@Arkena
3	Error	Activated	May 7 23:01:15		14h	VB288-VB288	OTT	OTT xml error NRK.Troms@Arkena
4	Error	Activated	May 7 23:02:14		14h	VB288-VB288	OTT	OTT xml error NRK.Trandelag@Arkena
5	Cleared	Cleared	May 8 13:40:30	May 8 13:40:38	8s	VB288-VB288	E-OTT	OTT alignment NRK.Suoc@Arkena
6	Cleared	Cleared	May 8 13:14:22	May 8 13:27:30	13m	VB288-VB288	E-OTT	OTT alignment Biebob
7	Cleared	Cleared	May 8 13:25:36	May 8 13:25:45	9s	VB288-VB288	E-OTT	OTT alignment Wowza Cam DASH
8	Cleared	Cleared	May 8 12:33:14	May 8 13:24:15	51m	VB288-VB288	OTT	OTT xml error Integral testing
9	Cleared	Cleared	May 8 12:44:19	May 8 12:57:26	13m	VB288-VB288	E-OTT	OTT alignment Biebob
10	Cleared	Cleared	May 8 12:14:15	May 8 12:27:23	13m	VB288-VB288	E-OTT	OTT alignment Biebob

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

Tech Features

VB288 OBJECTIVE QoE CONTENT EXTRACTOR

- 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
- VB288 supports unreferenced MOS, blocking, blurring, noise, contrast and brightness reporting for video analysis
- 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
- 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
- CEA-608 (NTSC), CEA-708 (DTVCC), SCTE-20 from MPEG-2 and H.264 supported
- Live captioning view
- Archive support for proof of compliance

MINIMUM SERVER CONFIGURATION

OS Red Hat Enterprise 7

2 x 6 core Intel >2.0 GHz CPUs

32GB DDR SDRAM

100GB HDD

2 x 1GB Ethernet NIC

Software Options

OTT ENGINE-OPTION

The use of OTT technologies like variable bit rate HLS, SmoothStream and HDS for distribution of media to all kinds of receiving platforms is rapidly expanding, portable devices used in multiscreen applications being particularly important for OTT deployment to be a preferred method for media signal delivery. Content distribution using OTT is complex, and it is necessary for a service provider to perform continuous surveillance of signal availability and integrity of both LIVE multi-profile streams and VOD content. The OTT Option provides the same paradigms as more traditional media transports enabling easy understanding of complex media transportation where operators have both traditional and new distribution systems. The OTT options, available for all Bridge Technologies probes, enables monitoring and analysis of HLS, SmoothStream, HDS and MPEG-DASH streams. The OTT engine will check that stream and profile manifest files, the «lists of contents», are syntactically correct and updated, that all stream profiles are available and that stream chunks are delivered on time.

[Learn more: OTT and BULK OTT](#)

CLOSED CAPTION-OPTION

Closed Caption Extraction CEA608/CEA708. Enables CC extraction on all 100 services

Learn more: Contact your representative for more details

Ordering Codes

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

VB288-OTT-OPT – 25 engines with active testing of 25 channels, factory ordered. Up to 4 engines. Requires v5.2 sw

VB288-OTT-UPGR – 25 engines with active testing of 25 channels, upgrade. Up to 4 engines. Requires v5.2 sw

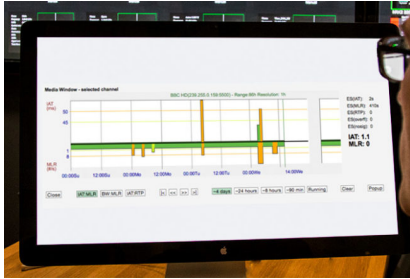
VB288-CC-OPT – Closed Caption Extraction CEA608/CEA708. Enables CC extraction on all 100 services. Factory ordered

VB288-CC-UPGR – Closed Caption Extraction CEA608/CEA708. Enables CC extraction on all 100 services. Upgrade

Documentation

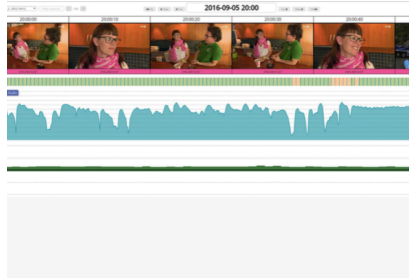
[User Manual – Download](#)

Related Products



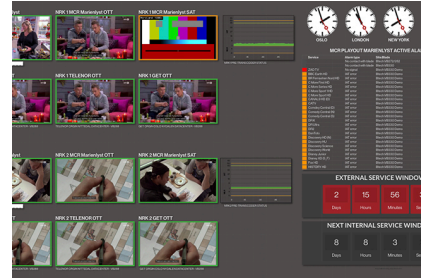
VBC

VBC CONTROLLER SERVER



ARCHIVE SERVER

ARCHIVE SERVER & VBC
TIMELINE



RDW

REMOTE DATA WALL