

XENTAURIX® Media & Broadcast Logger Type Standard

The XENTAURIX Media & Broadcast Logger (XBL) is a professional broadcast recording and verification system for digital recording and playback of a wide variety of Broadcast and Web TV & Radio signals as well Social Media streams, IP-Video and other sources, including their meta data. Originally designed as a pure digital long term video recorder, the Media & Broadcast Logger has meanwhile grown far beyond this field of application. It is used as a multi-channel multi-signal video encoder, transcoder, recorder, streaming and web server for the production of video clips, snapshots as well for signal and multiscreen monitoring, as a search engine and to be used for content analysis. The Logger systems are characterized by groundbreaking user-friendliness, high flexibility and multi-functionality and have been in use since 2000.



Areas of Application

- TV, Radio, Video & Web streaming monitoring and compliance logging
- Competition monitoring
- Media supervision monitoring
- TV-Spot monitoring
- TV audience analytics
- AI-based content analysis
- Catch-Up TV
- Activity and debriefing recording in Command Centers, Situation Rooms, Training Facilities
- Social Media Livestream monitoring and recording
- IPTV OTT

Scalable, multifunctional System

The Standard Media & Broadcast Logger is an all-in-one appliance that includes signal inputs, encoder, decoder, transcoder, database, streaming and web server, storage, and user and content management. Depending on the size of the internal or external storage, type of signal source, bandwidth and other factors, recordings can be made over periods of weeks, months or even years (loop recording).

Record Web-TV Streams and Websites

The Media & Broadcast Logger also records live video streams from Web TV as well as from social media channels (Facebook, YouTube, Twitch, Instagram etc.) automatically, manually or time-controlled and can be analyzed. The system also offers the option of recording and archiving complete websites, including all sub-pages or specific websites.

Recording and Search in Metadata

Subtitles, as-run logs, teletext, or metadata from video and audio fingerprinting, speech recognition, and AI-based video analytics are recorded in sync with the content. Bookmarks can be added during or after recording. By combining the recording with metadata, video content can be quickly found via the integrated full-text search engine and retrieved down to the second. The Media & Broadcast Logger Type Standard is an extraordinary TV/ Radio/ Video/ Media search engine for professional applications.

Multisource Operation

In the basic configuration, the XBL-Subunits have M/SPTS IP inputs. Optional signal inputs for Analog, DVB-S/C/T + ATSC/ATSC3.0, SDI up to UHD, ASI, QAM, RGB/ DVI/ HDMI, TS-IP, RTMP, RTSP, MPEG Dash, SMOOTH and Radio FM/ AM/ DAB (via antenna) are available.

Integrated Receiver

For DVB and FM/AM/DAB applications, the Logger has integrated receivers. A DVB-S/C/T receiver can contain up to 8 internal tuners. In AM/FM/DAB operation, one receiver card can process up to 32 radio stations simultaneously.



TS Native & Proxy Recording

The optional X-TS module enables recording of DVB and IP signal sources in the Native MPEG-TS format. A combination with the H.264/265 proxy enables frame-accurate editing, cutting and uploading of TS Native videos through the Low Resolution Proxy.

Dash Streaming

The Logger, in combination with the integrated streaming and web server, offers MPEG-Dash streaming for live and instant replay function, VoD and Play-Out.

Easy handling, user friendly

The modern HTML5-based dashboard with several templates offers a combination of multiscreen live signal and playback, metadata, clip placement, search functions, storyboard and analysis tool displays on one interface. Layouts can be created individually and stored user-specifically locally as well as centrally. Video clips can be

edited quickly and easily via drag & drop, cut frame-accurately and uploaded at the click of a mouse. Frame-store-based recording technology allows clients to switch from live viewing directly to instant replay and create video clips in this mode as well. With add-on modules, a variety of complementary applications are possible, such as audience rating analysis, TV spot monitoring, S2T, AI-based content analysis, multiscreen monitoring, etc. The HTML5-based dashboard supports all common browsers such as Edge, Safari, Firefox, Chrome as well as all stationary and mobile devices with different operating systems such as iOS, Android or Windows.

Media & Broadcast Logger Type Standard

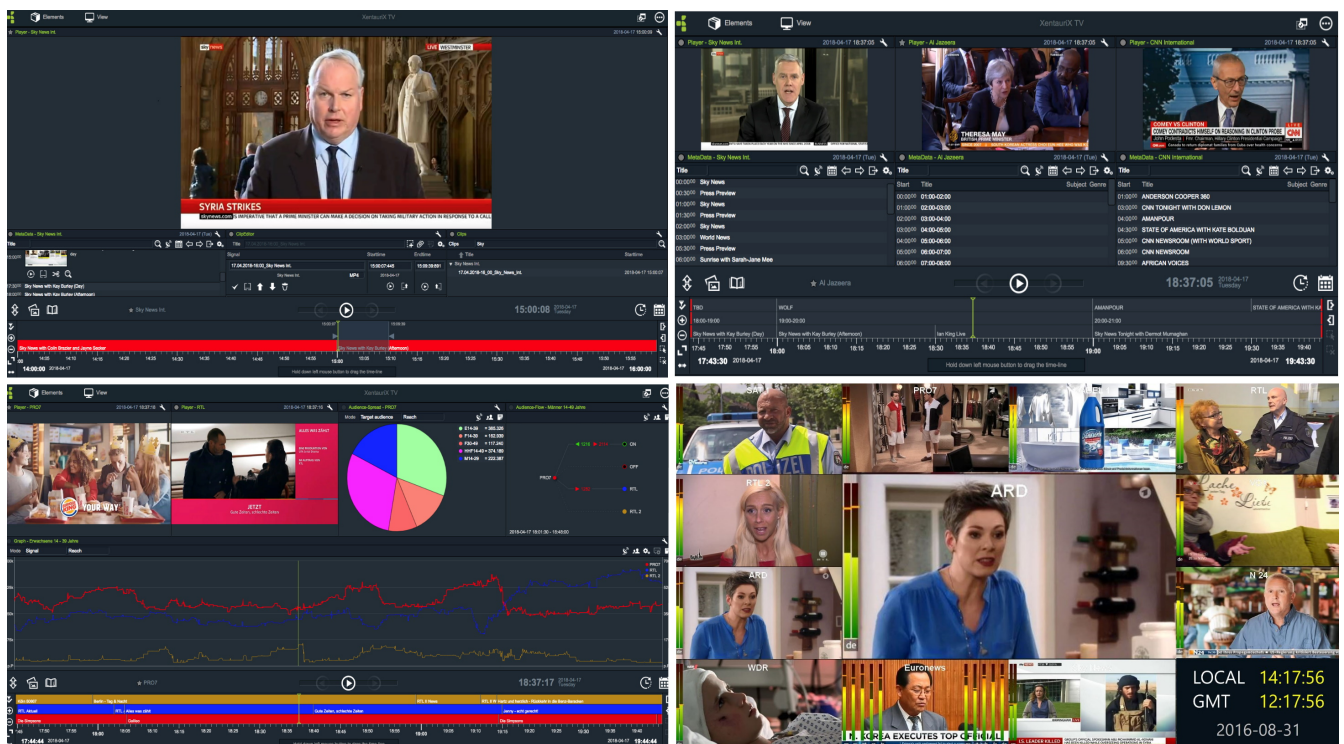
The All-in-One Standard Media & Broadcast Logger is available as an appliance with 1-20 channels, integrated RAID1 array and user-specific hard disk capacity. RAID5 array and other hardware components and software tools are optionally available. An external storage server can be offered for long-term archiving.

Expandability

The Standard Media & Broadcast Logger can be extended to the Professional System by means of software and hardware upgrades. The Logger system can be expanded as required, be operated at a wide variety of locations and be retrieved, monitored and configured both locally and centrally. The combination of XBL-Masterunit and Subunits offers operation with a wide variety of signal inputs, enables customer-specific systems that can be modernized at any time, and thus offers investment security. By cascading XBL-Subunits, a virtually unlimited number of channels is available. For high availability requirements, the Logger system is available in cluster fail-back design.

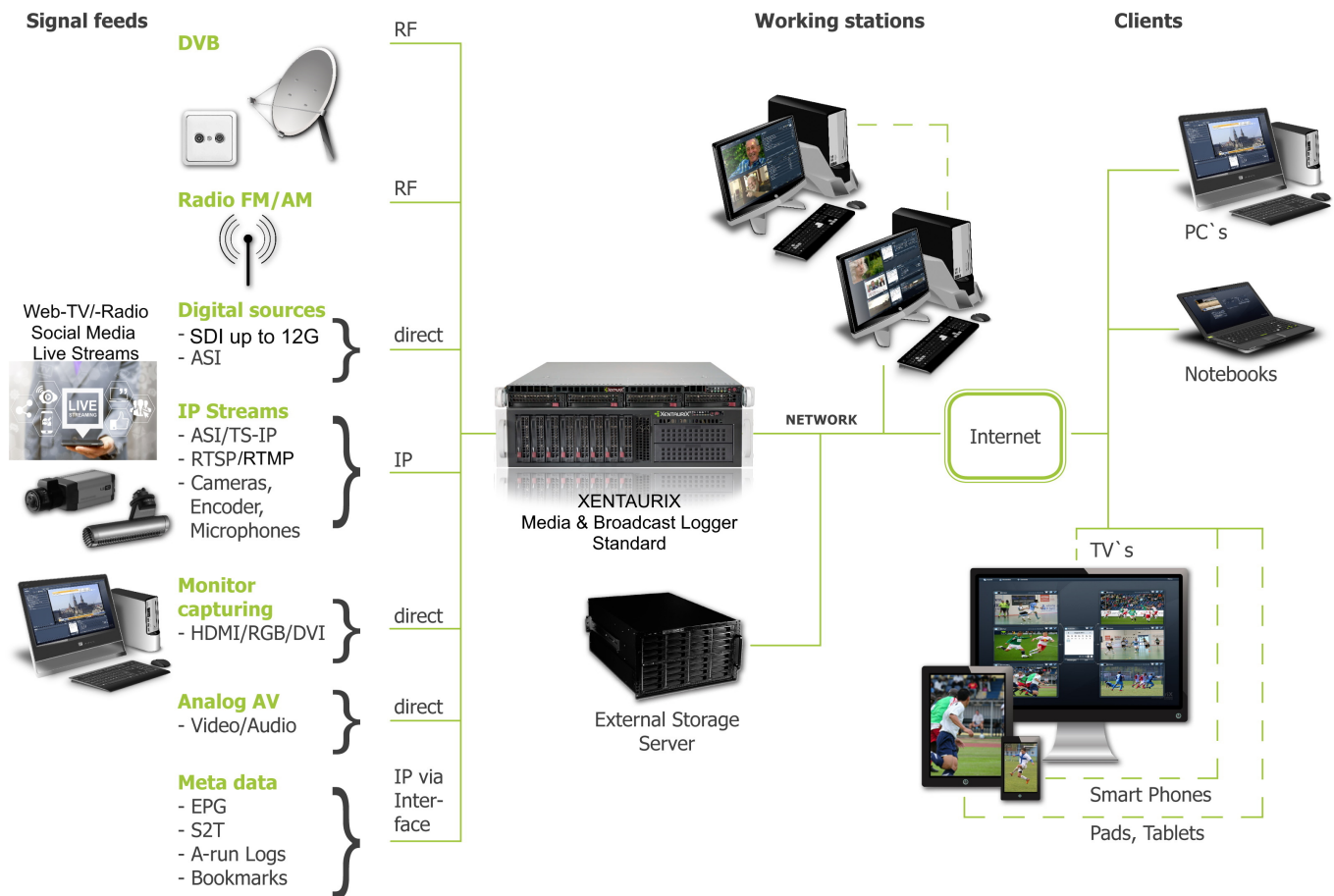
No client license fees

There are no client license fees for the XENTAURIX Media & Broadcast Logger type "Standard". The number of queries - due to the hardware performance - is limited to 20 simultaneous clients for this version. For the "Professional" type there is no limit neither for the number of clients nor for the total number of clients.



Images: Examples of individually created dashboard layouts

XENTAURIX Media & Broadcast Logger Standard



Extensions / Software and Hardware Modules & Tools

Multiple Input Devices

Standard: M/SPTS and RTP/RTSP IP inputs (UDP/TCP/RTP) and optionally: Analog, DVB-S/C/T + ATSC/ATSC3.0, SDI up to UHD, ASI, QAM, RGB/ DVI/HDMI, TS-IP, RTMP, RTSP, MPEG Dash, SMOOTH and Radio FM/AM/ DAB (via antenna)

Logger Hardware

The hardware is designed for very high operational reliability. To ensure maximum fail-safe operation, the following hardware options are available:

- **X-Cluster:** Highest operational reliability due to cluster system
- **X-FailOver:** Failover security through failover backup server (n+1)

TS & Proxy Monitoring & Recording

- **X-TS module:** The module enables recording of DVB and IP signal sources in Native MPEG TS. The combination with a low resolution H.264/265 proxy enables frame accurate editing, cutting and uploading of TS Native videos.

TV Audience Analytics

- **X-TV Rating Monitor** Ideal module for the clear presentation and evaluation of TV viewer ratings, viewer groups or viewer migration. This is a very effective way of evaluating and optimizing TV reports or commercials.

Content Recognition

- **TV spot monitoring** For automatic recognition of TV spots
- **Music recognition** TV/radio: Enables automatic recognition of music titles on TV and radio with title, artist, playing time and other data based on a central music database.

- **Speech to Text Recognition (S2T):** The X-S2T module enables automatic transcription of speech to text in 24/7 mode, timer mode and by creating video and audio clips. The X-S2T module supports a variety of international languages.
- **TV content recognition using AI** TV and video content is automatically analyzed using artificial intelligence and identified according to pattern features.

Signal Monitoring

- The XBL broadcast systems include a variety of free monitoring features as standard according to ETSI TR101 290. For DVB, signal strength and signal quality are logged, signal error messages are generated for CC (continuity, counter), PMT (program map table), PES (packet-sized elementary stream) and TEI (transport error indicator) as well as SCTE-35/SCTE-104 flag monitoring.
- **X-VALD** (Video/Audio Loss and image freeze) module for detection of video/audio loss and freezing of transmission
- **X-Loudness** Module for monitoring and displaying level loudness according to EBU R128/ITU-R BS.1770-1

Subtitles/Closed Captions

- **X-CC/TT** This module extracts closed captions, DVB subtitles and Video/Teletext pages from the TV signal and stores them in the database with the videos. Through text-based search engine, relevant videos can be played back immediately.

Multiaudio

- **X-MultiAudio** module for recording, streaming, and playing back another stereo channel in a video stream. Up to 8 stereo channels per stream are possible.

Multiviewer

- With the **X-Multiviewer** module, the XENTAURIX system can be expanded to an external monitor/video wall display. Live TV, radio and video streams with metadata are displayed on one or more monitors.

Website Recording

- Websites can also be monitored, recorded and analysed with the XBL System. The recording takes place at cyclical intervals, depending on the scope of the web pages. Tracking makes it possible to identify changes in the pages; pages deleted by the provider can be called up in the records.

Details about the software and hardware extensions for the Media & Broadcast Loggers as well as support and services can be found under <https://www.xentaurix.com/en/products/xentaurix-modules/>

Highlights XENTAURIX Media & Broadcast Logger "Standard"

- Scalable, multi-functional multi-channel, multi-signal Media & Broadcast Logger System
- State-of-the-art, clear and user-friendly HTML5 dashboard with individual layout creation and local and central storage
- Multiscreen display for live and synchronous playback
- Modular design, expandable at any time, no channel limitation
- Input signals: M/SPTS and RTP/RTSP IP inputs (UDP/TCP/RTP) and optionally: Analog, DVB-S/C/T + ATSC/ATSC3.0, SDI up to UHD, ASI, QAM, RGB/ DVI/HDMI, TS-IP, RTMP, RTSP, MPEG Dash, SMOOTH and Radio FM/AM/ DAB (via antenna)
- Very fast insertion and configuration of new signal sources
- Multibit Streaming encoding, recording, playback and restreaming
- TS recording in MPEG Native format with LR Proxy (optional)
- Simultaneous display and playback of selected channels and video clips
- Import, display and search of metadata like EPG, as-run logs, subtitles, bookmarks
- Support for speech recognition and transcriptions (Professional only)
- Playback of recorded data via slider with fast forward and rewind, bookmarks, storyboard, search words, calendar, video clips
- Instant replay function over the entire recording time
- Storyboard function
- LDAP support
- Transcoder support
- Integrated Clip Maker
- EPG Importer
- Multibit recording, adjustable for each channel
- Ring memory adjustable for each channel (in days or by memory capacity)
- Integrated timer for scheduled recordings
- Integrated web and streaming server
- Administration level: configuration, search, filtering, group functionality, signal analysis of live and recorded signals
- Alarm management and mail notification, system status display
- Highest operational security through cluster and failover backup system (optional)
- Multilingual DE, GB, Arabic additional menu languages on request
- Highly reliable software and hardware Made in Germany
- In use worldwide since 2001

Recording time of XBL Standard Logger in days with 2x10TB@Raid1 storage capacity

Channels/Bandwidth	1Mbps	2Mbps	4Mbps	8Mbps	16Mbps
1	1000	500	250	125	62.5
2	500	250	125	62.5	31.2
4	250	125	62.5	31.25	15.6
8	125	62.5	31.25	15.6	7.8
16	62.5	31.25	15.6	7.8	3.9

Delivery Options

Article No.	Typ
420201	XBL-STD30401 1-Channel Media & Broadcast Logger "Standard" with 1 x M/SPTS-IP Inputs
420202	XBL-STD30402 2-Channel Media & Broadcast Logger "Standard" with 2 x M/SPTS-IP-Inputs
420204	XBL-STD30404 4-Channel Media & Broadcast Logger "Standard" with 4 x M/SPTS-IP-Inputs
420208	XBL-STD30408 8-Channel Media & Broadcast Logger "Standard" with 8 x M/SPTS-IP-Inputs
420216	XBL-STD30416 16-Channel Media & Broadcast Logger "Standard" with 16 x M/SPTS-IP-Inputs

Additional delivery options on request