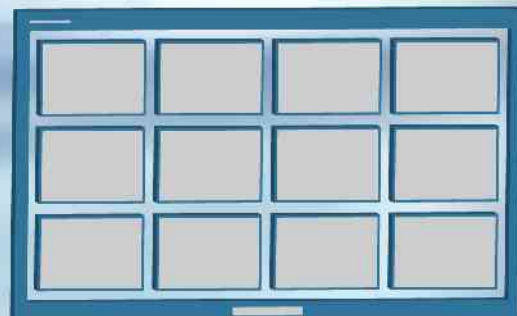
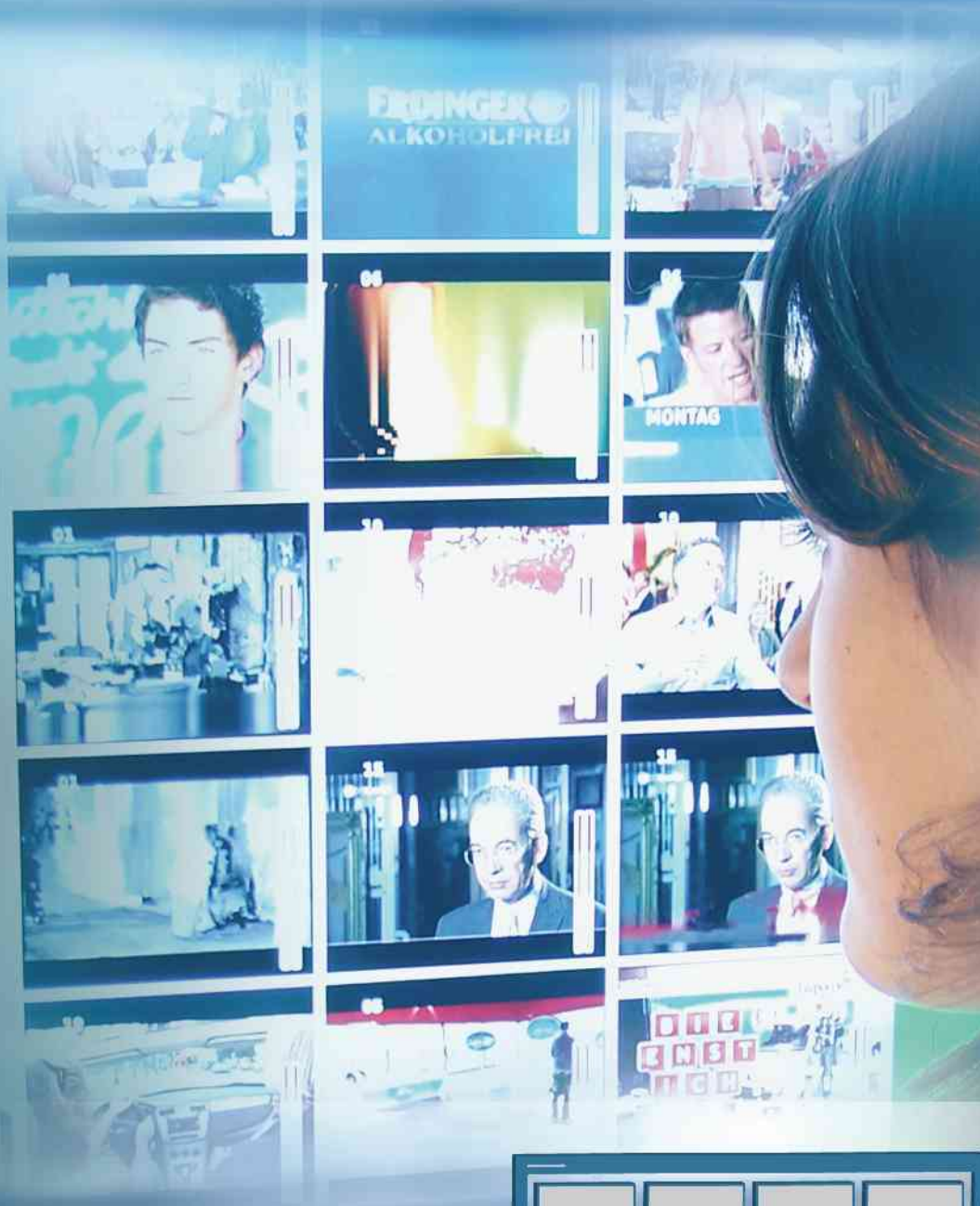


# Broadcast Multiscreen Monitor



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## BUSINESS NEEDS

Platform operation teams are in need of a reliable visual headend monitoring for compressed TV signals to perceive any changes of the status of any components in the system.

Stream status monitoring, as performed in many video headends, is not sufficient, as streams might look free from errors, but video content is broken. Thus, a visual monitoring solution should be able to receive and display a wide range of signal formats and media codecs to allow monitoring at all points of system.



## BROADCAST MULTISCREEN MONITOR

The GMIT Broadcast Multiscreen Monitor (BMM) is a server-based solution for visual monitoring of encoded video services. It supports a wide range of mobile TV, IPTV and DVB signals and consequently, it is the perfect tool for permanently screening your video headend. Even having a closer look at just one of the displayed services is easy: Just clicking on a tile with an external mouse, displays the respective service in full screen mode and native resolution.

Combined with the additional remote monitoring functionality, no direct physical access to the BMM is necessary. Monitor the complete BMM screen using a regular desktop PC or laptop from your office or demonstrate the visual synopsis live during customer presentations.

Based on its dynamic screen layout capabilities and the free tile arrangement, even in 3D mode, the BMM is also the perfect and eye-catching solution for exhibition purposes e.g. on fairs, conventions or pre-sales workshops.

## PRODUCT FEATURES

The GMIT BMM is a highly flexible and state-of-the-art server-based multiscreen solution. Use all its ground-breaking features for monitoring, validation or customer presentations:

- Stream reception via IP Multicast, DVB-H, DVB-T, DVB-S, DVB-C or ASI
- Video formats: H.264 video over RTP, MPEG-2 video over SPTS or MPTS
- Exceeding image quality produced by advanced scaling, de-interlacing and decoding algorithms
- Free configurable BMM screen: position, size and amount of tiles can be defined by user
- Easy web-based configuration and arrangement using drag & drop functionality
- Display of additional parameters (e.g. frame rate, audio level) and stream lost detection delivers further informations on stream status
- Enhanced video & audio monitoring providing automatic video freeze, audio silence detection and alarming
- MPEG-TS over IP output for remote monitoring without direct access to system even with low bandwidth
- Descrambling of ISMACryp protected DVB-H streams

## BUSINESS BENEFITS

Using the GMIT Broadcast Multiscreen Monitor (BMM) provides numerous advantages, approved by many customers using the GMIT BMM in several commercial deployments, marketing trials or customer presentations.

- BMM is cost effective: Due to its flexible pricing and licensing model, customer just needs to acquire the amount of tiles and input formats he actually needs. Upgrading is easy if the system will be enlarged and more tiles are needed.
- BMM is flexible: Monitor all critical components even if you are not in front of your multiscreen. With its compatibility to a variety of input signals and its remote monitoring functionality, the BMM let you get a snapshot of your system status any-time anywhere.
- BMM is reliable: Intended for usage in broadcast environments and based on long term supported Linux OS, the BMM is validated for unattended 24x7 usage and completely future-proofed.

Due to its highly flexible software architecture and design, the GMIT BMM can easily be adapted. Customers are therefore flexible for future enhancements and upcoming standards and well prepared for individual integrations and customizations. This reduces time-to-market and provides competitive advantages.



## TECHNICAL SPECIFICATION

### Input

#### INPUT PROTOCOLS

- RTP over IPv4/UDP (IETF RFC 3550)
- MPEG-2 Transport Stream (ISO 13818-1) over IPv4/UDP or optional DVB/ASI Interfaces - depending on amount of installed reception cards

#### INPUT SOURCES

- Ethernet Network Interface
- Recorded Transport Stream File

#### OPTIONAL SUPPORTED RECEPTION CARDS

- DVB (H/T/S/C) RF Interfaces
- ASI Transport Stream Interfaces

### Supported Codecs

#### VIDEO

- H.264 Baseline Profile (QVGA resolution)
- MPEG-2 Video Main Profile (SD-resolution)

#### AUDIO

- HE AAC, MPEG-1 Audio Layer II

#### VISUALISATION

- Visualisation of ISMACryp protected streams

### Output

#### LOCAL MONITORING

- BMM screen output via VGA/DVI Output

#### REMOTE MONITORING

- BMM screen output via encoded Video as MPEG TS over IP
- BMM screen output as JPEG still screens

### Administration and Monitoring

#### LOCAL

- Control: Console-based UI

#### REMOTE

- Control: Web-based UI and SNMPv2 Control
- Monitoring: Web-based UI and SNMPv2

### Hardware and System Requirements

#### HARDWARE REQUIREMENTS

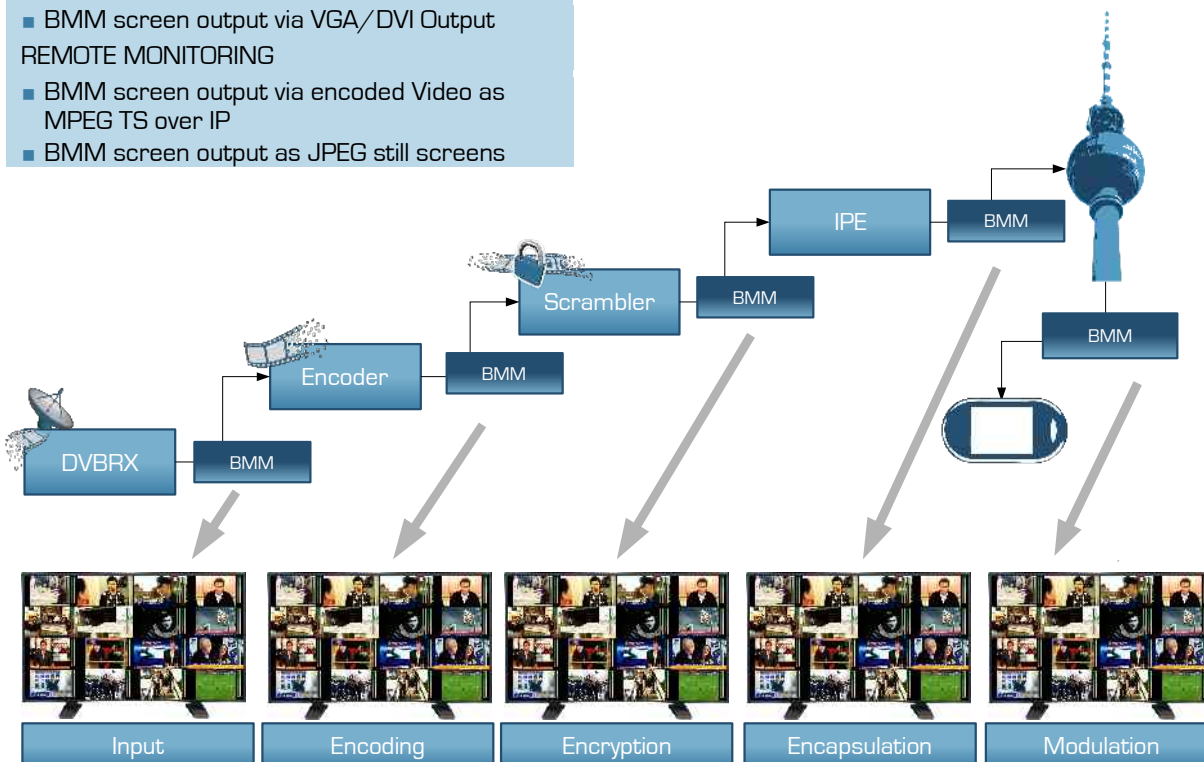
- CPU: min. 1x INTEL XEON Quadcore (depending on tile count)
- RAM: 4 GByte
- USB: Port for license key (alternative network connection to dedicated license server)
- Graphic card with available Linux and OpenGL support (recommendations can be provided)

#### OPERATING SYSTEM

- Ubuntu Linux LTS 8.04 (Hardy) 32 bit server edition

#### SUPPORT

- Internet connection (FTP) necessary for easy installation (alternative installation possible)
- SSH connection necessary for additional GMIT support



# Contact

## GMIT GMBH

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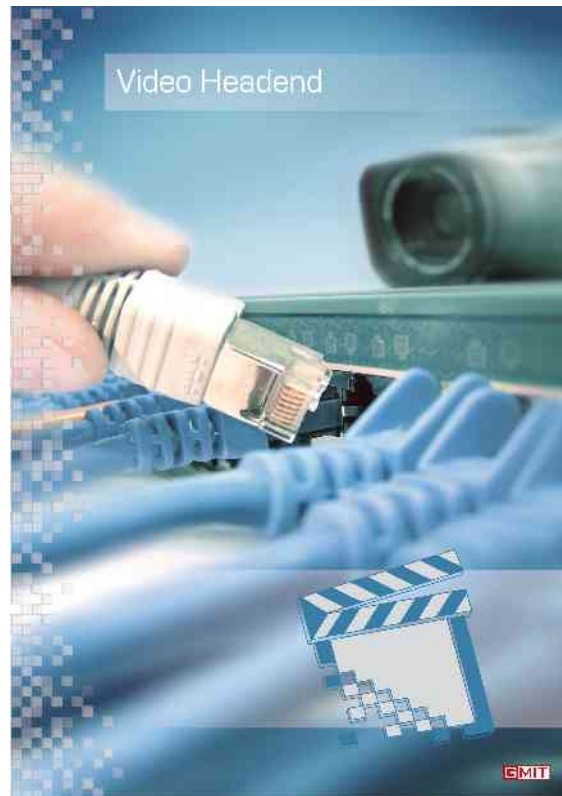
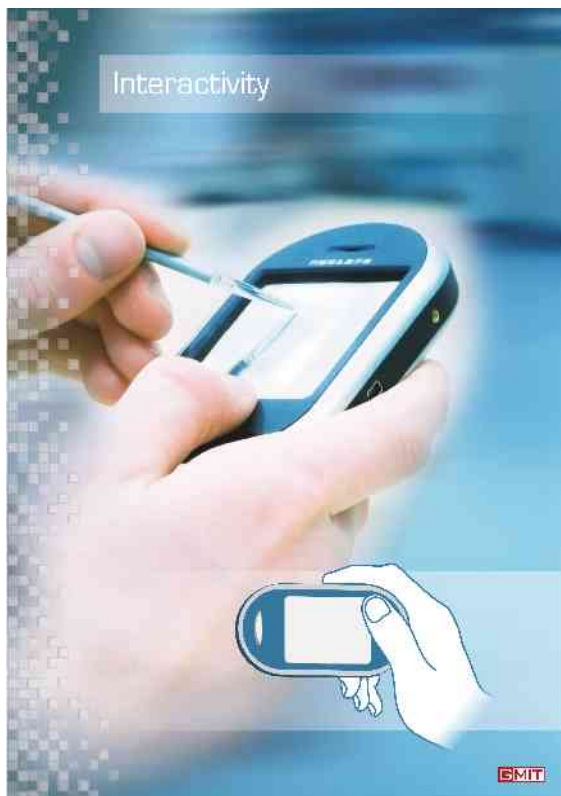
WEB: [www.gmit-gmbh.de](http://www.gmit-gmbh.de)

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## GET MORE INFORMATION



## MORE GMIT PRODUCTS



GMIT is a component supplier providing headend technology and interactivity for digital and mobile broadcast. Our software products for stationary and mobile TV are optimized to satisfy the essential needs for reliability, economy and flexibility.