



# FITIS™

Fully Integrated Tactical IPTV System  
for Full Motion Video Management



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## Fully Integrated Tactical IPTV System for Full Motion Video Management

**FITIS™ is an integrated, end-to-end Full Motion Video (FMV) solution for processing, archiving, indexing, managing and disseminating tactical ISR video and metadata sources. It enables government and military entities to quickly process and exploit live and recorded video assets to create actionable, reliable, real-time intelligence.**

Warfare today is much more complex than ever before and is evolving rapidly. Operational units rely on Full Motion Video (FMV) gathered by unmanned aircraft, ground sensors, and other remote sources, which provide vast amounts of Intelligence, Surveillance and Reconnaissance (ISR) data. While sheer volume makes data management difficult, integrating the many data formats and footage of myriad specific focal points into larger situational intelligence is an even greater challenge.

### **Actionable, reliable and flexible solution for FMV applications**

FITIS (Fully Integrated Tactical IPTV System) is an innovative, end-to-end integrated FMV IPTV solution for the Operational Command that addresses these complex challenges by effectively capturing, storing and managing video and data from remote sources, and distributing FMV content and metadata across multiple network configurations. The flexible, centralized FITIS system provides efficient playback, sorting and retrieval of vital video assets, substantially reducing the time and resources necessary to process, exploit and disseminate tactical video imagery. FITIS enhances situational awareness and command decision-making processes across the full military hierarchy, from tactical forces through the highest ranks of command.

As a mission critical application that supports troops in the theater of operations, FITIS meets rigorous security, interoperability, reliability and scalability requirements. Its open architecture and full integration with FMV and IT equipment already in the field make the system easy to deploy, activate and maintain. FITIS supports dissemination of both situational awareness and exploitation qualities (100Kbps network efficient streams to 20Mbps 1080p video) simultaneously, and enables remote connection to personnel and systems across the world.

FITIS uses advanced H.264 compression and metadata insertion using the latest MISB / STANAG standards and supports legacy video as well. The system supports propagation of scenario-specific video imagery in a variety of formats and bandwidth constraints, ranging from high-definition ISR footage for analysts to ultra-compressed streams for transmission to tactical units at the edge.



### **Powerful management and decision-making tool**

FITIS enables users, either individually or in collaboration, to annotate video content in real-time by inserting free text information that is frame-accurate for searching and retrieval. Automatically generated geospatial and time-based information as well as users' custom annotations are logged and indexed for fast retrieval by both local and remote disadvantaged users.



FITIS integrates seamlessly with network storage devices to facilitate transition of video assets through workflow processes with defined retention periods. Archives can be maintained for specified time periods, and video clips spliced to create compilations encompassing full mission areas and time-lapse views of targets of interest. FITIS can provide historical data to facilitate future decision making processes, and as after-action aids for training and lessons learned analysis.

Based on the renowned Optibase EZ TV system, FITIS Player supports user-selected mosaic views of 1, 4, 9 or 16 concurrent video feeds. Selected metadata can be displayed on-screen, without in any way altering the original video.

FITIS is fully integrated with Optibase professional-class video decoders, encoders and streaming platforms from the flexible, robust MGW series.

## System Components

**FITIS Manager** - Secure, powerful browser-based administration interface with full control over all aspects of the FITIS system

**FITIS NDVR Module** - Built-in recording and archiving module records IP streams to local or remote storage (integrated with all major "NAS/SAN" solutions)

**FITIS MAM Module** - Media asset management module offers compressive video file management and editing capabilities.

**FITIS VOD Module** - Video on Demand server serves recorded assets on-demand to LAN and WAN users based on permissions schemas.

**FITIS Player** - browser-based full motion video front-end player. Packs powerful features in a user-intuitive user interface; time shifting, mosaic views, KLV metadata playback (synchronized with video), annotations and more.

## Benefits

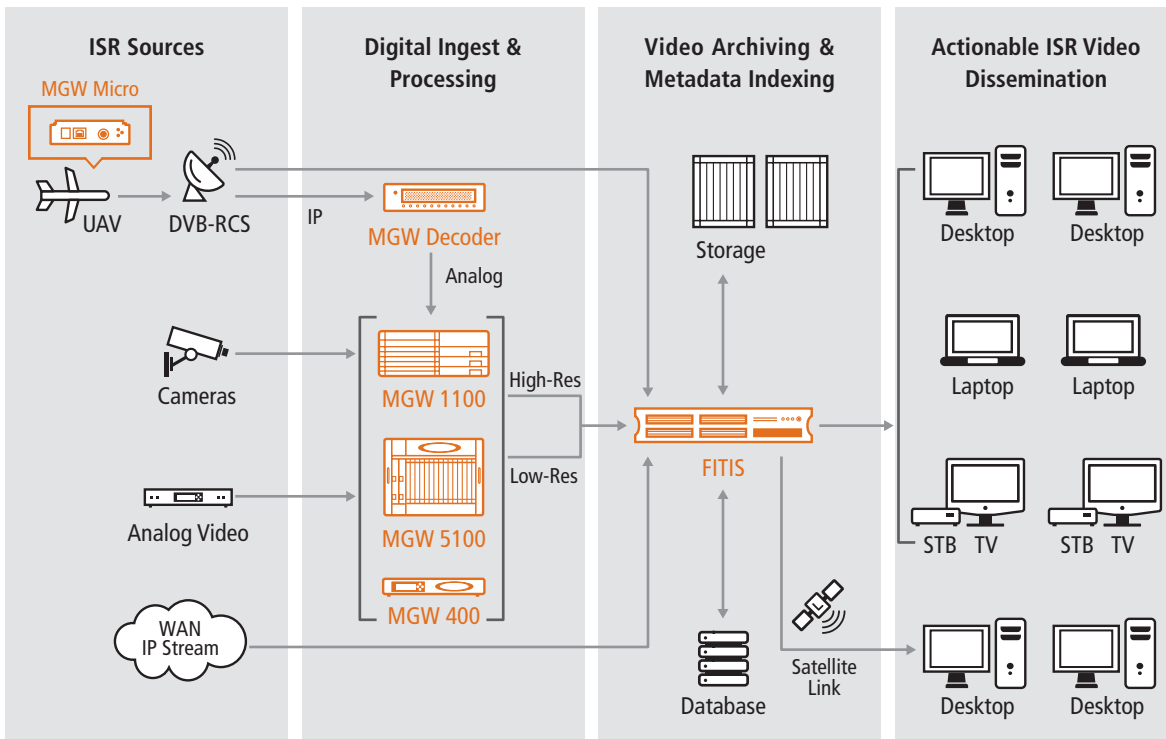
- Secure IP-based access to real-time situational awareness video
- Enhanced processing, indexing, exploitation and dissemination of motion imagery
- Rapid, easy integration with deployed FMV and IT equipment
- Increased operational performance
- Secure, reliable and scalable to meet exacting military requirements
- Support for multiple encoding formats
- Integrated content flow from ingest to distribution
- Reduces manpower resources required for video asset management
- Workflow process meets archive retention requirements
- End-to-end integrated solution

## Applications

- Recording, indexing and distribution of STANAG compatible streams
- Real-time actionable FMV intelligence for situational awareness command decisions
- Historical operations archives to support decision-making process
- After-action review tool for training and lessons-learned analysis

## Key Features

- Recording and archiving of DVB-RCS streams with metadata
- Advanced channel guide with grouping and access control, integrated with Microsoft Active Directory
- Real-time viewing of SD and HD video streams
- Powerful browser-based video player with time shifting, mosaic views and KLV preview capabilities
- Annotation of archived video data



## Technical Specifications

### Operating System Compatibility

- Server: Windows 2003 (32/64-bit), Windows 2008 (32/64-bit) including STIG platforms
- Clients: Windows XP Pro, Windows Vista (32/64-bit), Windows 7 (32/64-bit), Windows 2003 (32/64-bit), Windows 2008 (32/64-bit)

### FMV Formats

MPEG-1, MPEG-2 (SD/HD), MPEG-4 ISO, MPEG-4 Part-10 H.264 (SD/HD), Third-party and legacy IP streams\*

### Protocols

TCP, UDP, RTP, RTSP, HTTP, Unicast and Multicast

### Metadata Standards

SCTE-20, SCTE-21, MISB STD 0604, MISB EG 0904, MISB STD 0601, STANAG 4609

### System Throughput

- Real-Time FMV recording and archiving of up to 800Mbps concurrent FMV IP traffic
- Supports up to 5,000 concurrent users/viewers from a single FITIS platform

### Footprint

Supported platforms include standalone servers, tactical ruggedized notebooks and virtual machines

\*Contact for more details