THOMSON

▶ **VIDEO NETWORKS**

ViBE VS7000

CONVERGENT VIDEO SYSTEM

SINCE THE BEGINNING OF DIGITAL TELEVISION BROADCASTING, THOMSON VIDEO NETWORKS HAS BEEN SYNONYMOUS WITH INNOVATIVE VIDEO COMPRESSION. THE ViBE VS7000 VIDEO SYSTEM ENCOMPASSES THE NEXT-GENERATION COMPRESSION PLATFORM IN AN ALL-IP ENVIRONMENT, FROM LIVE BROADCAST-QUALITY ENCODING TO FASTER-THAN-REAL-TIME FILE TRANSCODING.

The Thomson ViBE VS7000 Video System is a fully-integrated IP video solution tailored for all new convergent applications such as Web TV and Over-The-Top (OTT) service delivery, as well as traditional IPTV and IP/Cable delivery. The ViBE VS7000 solution enables video operators to expand the reach of their services with a versatility never before seen in a compression platform.

SUPERIOR VIDEO QUALITY

End-user quality starts with the video itself. Whether it is delivering HDTV to the living-room, or streaming content to new mobile devices equipped with high-resolution displays, operators require the best possible video experience for their users. Leveraging on more than 15 years of best-in-class video quality and innovation in video compression algorithms, the ViBE VS7000 comprises Thomson's latest technological developments, providing stunning pictures for all delivery networks.

YOUR NETWORK, YOUR WORKFLOW

Each video operator's environment is specific; therefore the ViBE VS7000 provides a flexible way to design each workflow so as to meet the exact need of every operator. Simple yet powerful, the Workflow Builder allows the creation of live, file-based and mixed workflows, for any kind of network, with a simple click of a mouse.

MULTI-SCREEN, MULTI-CODEC, MULTI-FORMAT

With new formats emerging at a very high pace, delivering their content to multiple networks is becoming a real challenge for video operators. Combining all the major audio/video codecs and the latest adaptive streaming formats, the ViBE VS7000 provides a unique answer to IPTV delivery, Web TV streaming, and OTT services broadcasting.

OPERATIONAL EXCELLENCE

Simplicity: One unique graphical user interface allows for the controlling and monitoring of hundreds of channels simultaneously. With built-in 10GigE switches, racking and cabling nightmares vanish.

Reliability: Built around highly resilient IT platforms equipped with hot-swappable, redundant components, the ViBE VS7000 provides native load-balancing and system redundancy to avoid downtime.
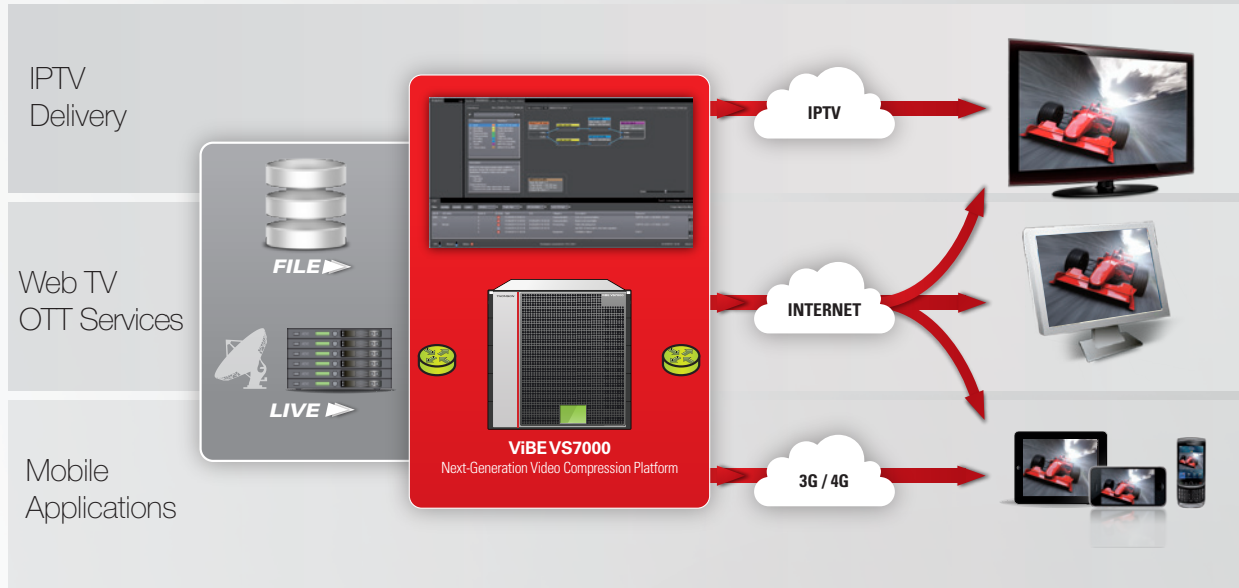
Scalability: From a single-server to multi-blade systems, the ViBE VS7000 is designed to scale and grow with your business.

The ViBE VS7000 sets new standards for operational excellence.

KEY FEATURES

- › Best-in-class video quality
- › Supports multiple video/audio codecs
- › MPEG transport stream support
- › Adaptive Bit Rate:
  - Adobe Flash
  - Apple HTTP Live Streaming
  - Microsoft Smooth Streaming
  - MPEG DASH
- › - File encoding

- › Video resolution up to 1920x1080
- › Progressive and interlaced modes
- › Multiple output formats per channel
- › Scalable number of input channels
- › Scalable number of output profiles
- › Advanced video and audio pre-processing
- › Integrated content protection
- › Suitable for live and file-based applications

- › HTTP Centralized Operation
- › Workflow Builder
- › SOAP/ Web services for external interfacing
- › Integrated load balancing and failover
- › IPV4 support

IPTV
Delivery

Web TV
OTT Services

Mobile
Applications

FILE ▶

LIVE ▶

ViBE VS7000
Next-Generation Video Compression Platform

IPTV

INTERNET

3G / 4G

SPECIFICATIONS

Video Encoding
› H.264 Baseline Profile
› H.264 Main Profile
› H.264 High Profile

Video Processing
› Smart de-interlacing
› Picture resizing
› Picture cropping/clipping
› Animated/static logo insert
› Mosaic generation
› Black out management

Video Decoding
› H.264 Baseline Profile
› H.264 Main Profile
› H.264 High Profile
› MPEG-2 Main Level
› MPEG-2 High Level

Resolutions and Frame Rates
› Up to 1920x1080i @ 60fps
› Up to 1920x1080p @ 30fps
› Up to 1280x720p @ 60fps
› Resolution adjust: 2 pixels
› Min. resolution: 64x64
› Frame rate adjustment
› Min. frame rate: 5 fps

Audio Encoding
› MPEG-1 Layer II
› AAC-LC
› HE-AAC v1.0 / v2.0
› AC3 / E-AC3

Audio Processing
› Re-sampling (8 to 48 kHz)
› Stereo / mono conversions
› Multi-channel down-mixing
› Static gain adjustment
› Automatic Loudness Control
› Delay Adjustment

Audio Decoding
› MPEG-1 Layer II
› AAC-LC
› HE-AAC v1.0 / v2.0
› AC3 / AC3+

Content Protection
› AES scrambling
› Apple HLS encryption
› Microsoft PlayReady DRM

Pass-through
› Audio
› Video
› Data

Live Input
› MPEG-2 TS MPTS/SPTS over IP
   (CBR & VBR)
› Unicast and multicast
› IPV4 and IPV6 support
› IGMP V3

Live Output
› MPEG-2 TS MPTS/SPTS over IP
› RTP/UDP streaming
› Adobe Flash / RTMP
› Apple HTTP Live streaming
› Microsoft Smooth streaming
› MPEG-Dash
› Unicast and multicast
› IPV4 support

File Formats
› MPEG-2 TS
› MP4
› Apple HTTP Live Streaming
› Microsoft Smooth Streaming
› MPEG Dash

Physical Interfaces
› 10 GigE optical
› 1 GigE electrical and optical
› SDI / HD-SDI

Physical Characteristics
› 1RUx19", 6RUx19", or 10RUx19"
› Hot swappable power supplies
› Hot swappable fans
› Hot swappable processing units
› Hot swappable IP switches
› Cooling: front-rear airflow

Environmental Conditions
› Operating temperature:
   10 to 35°C / 50 to 95°F
› Storage temperature:
   -30° to 60°C / -22 to 140°F
› Maximum humidity: 90%

ORDERING INFORMATION

Base Systems

NVSSASP1AB
› VS7000 system storage
   and processing platform
   – RAID1 HDD - 1RU

NVSSAPP1AB
› VS7000 processing platform
   – diskless - 1RU

NVSBSP06AA
› VS7000 blade chassis
   – hosts up to 8 blades - 6RU

NVSBSP10AA
› VS7000 Blade Chassis
   – hosts up to 16 blades - 10RU

PROFESSIONAL SERVICES

Our professional services offerings ensure optimal system performance and maximize uptime. These services include call centers staffed around the clock; system planning, design, and commissioning; professional training courses; and technical maintenance programs and service agreements.

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