

# TwinPEG™ Pro

Advanced MPEG Encoder

SDI & YUV MPEG-4, MPEG-2, MPEG-1 encoder

## Advanced MPEG encoder for professionals

TwinPEG™ Pro is an advanced MPEG encoding solution for professionals with innovative features including DUAL encoding. Indeed, TwinPEG™ Pro is able to simultaneously generate two MPEG files from a unique video source such as : MPEG-4 CIF low bitrate and MPEG-2 high quality FD1 in 4:2:2 format.

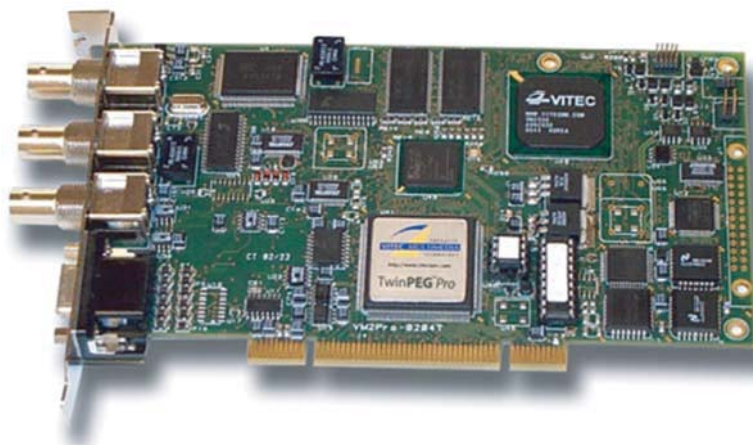
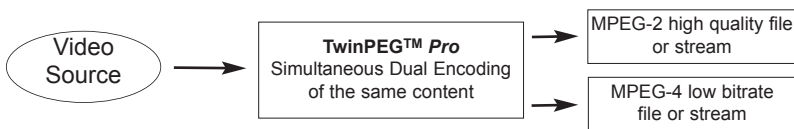
### Key features

- SDI & YUV inputs,
- AES/EBU & embedded audio in SDI,
- DUAL encoding,
- MPEG-4 & MPEG-2 & MPEG1,
- Transport Stream & Program Stream,
- 4:2:2 & 4:2:0 Profiles,
- 24/7 encoding,
- Preview & Audiometer,
- Embedded Color Bar pattern,
- CC, WSS, TC,
- Pause/Resume mode,
- VTR control (VLAN),
- Still frame capture while encoding.

### Applications

TwinPEG™ Pro is ideal for many key applications:

- Video Ingest in production studios,
- Broadcast quality video archiving,
- Video streaming,
- DVD content creation,
- And much more ...



# TECHNICAL SPECIFICATIONS

<b>Inputs</b>	Video formats	NTSC/PAL/SECAM
	Video Inputs : analog	YUV, Y/C, composite (3 BNC)
	Video Inputs : digital	SDI (1 BNC)
	Audio Inputs : analog	Analog balanced audio (2 XLR)
	Audio Inputs : digital	Digital audio AES/EBU (1 XLR) & SDI embedded (BNC)
	Preview on VGA	yes

<b>Video Encoding</b>	MPEG-1	SIF, QSIF
	MPEG-2	FD1, 2/3D1, HD1, SIF, QSIF
	MPEG-4	FD1, 2/3D1, HD1, CIF, QCIF
	MPEG-4 ISMA Level 1	yes
	MPEG-4 profile	ASP / level 0-5 (1 object)
	Elementary streams MPEG-1 & -2	yes
	Elementary streams MPEG-4	no
	MPEG-1 System stream	yes
	MPEG-2 PS and TS	yes
	4:2:2 profile MPEG-2	up to 50 Mbit/s with I frames only
	4:2:2 profile MPEG-2	up to 25 Mbit/s with IBP & Motion estimation
	4:2:0 profile MPEG-2	up to 15 Mbit/s with IBP & Motion estimation
	MPEG-4 System stream	yes
	VCD 2.0, XVCD compliance	yes
	DVD, SVCD compliance	yes
	ISMA 1.0 Profile 0&1 (for MPEG-4)	yes
	Frame rate	29.97 (NTSC) 25 (PAL/SECAM)
	Adjustable frame rate	yes
	Bitrate MPEG-1	128 Kbit/s to 3 Mbit/s
	Bitrate MPEG-2	1 to 15 Mbit/s
	Bitrate MPEG-4	64 Kbit/s to 6 Mbit/s
	Bitrate regulation mode MPEG-1	CBR, VBR
	Bitrate regulation mode MPEG-2	CBR, VBR
	Bitrate regulation mode MPEG-4	CBR, VBR, CFR
	VBR with Average and Max settings	yes
	VBR with Fixed Quantizer	yes
	Adjustable GOP definition	IIII, IP, IBP, IBBP, ...
	IBP distance settings, closed GOP	yes
Scene Change Detection	yes	

<b>Audio Encoding</b>	MPEG-1 Layer 1 & 2	yes
	PCM	yes
	AC-3	yes
	MPEG-4 AAC Low Complexity	yes
	Sample rate	22, 32, 44.1, 48 KHz
	Bits per sample	16 bits
	Bitrate MPEG-1 audio	32 to 384 Kbit/s
	Bitrate AC3	96 to 640 Kbit/s
	Bitrate AAC-LC	20 to 128 Kbit/s
	Audio Mode	Mono, Stereo, Dual Stereo, Joint Stereo

<b>Signal calibrat°</b>	Brightness, Contrast, Saturation	yes
	Hue Adjustments	yes
	Audio Level Adjustments	yes

<b>Still image</b>	Resolution	720x576, 352x288 (PAL/S) 720x480, 352x240 (NTSC)
	Field or Frame (2 fields) Capture	yes

<b>Advanced Features</b>	DUAL encoding	yes
	Audio deembedding from SDI	yes
	CC, WSS, TC	yes
	Embedded color bar pattern	yes
	Still image capture while encoding	yes
	Audiometer overlaid on preview	yes
	Status overlay on preview window	yes
	Pause/Resume mode	yes
	Split mode (back to back files)	yes
	Skip frame mode (captures and compresses 1 frame among N)	yes
Drop frame mode (reduced frame rate & accelerated playback)	yes	
24/7 Very Long Encoding	yes	

<b>Software bundle</b>	Capture application	IMAGER for TwinPEG™ Pro
	VTR control software option	supports Frame accurate Edit Lists
	Frame accurate MPEG PS editor	DVD TOOLBOX Package

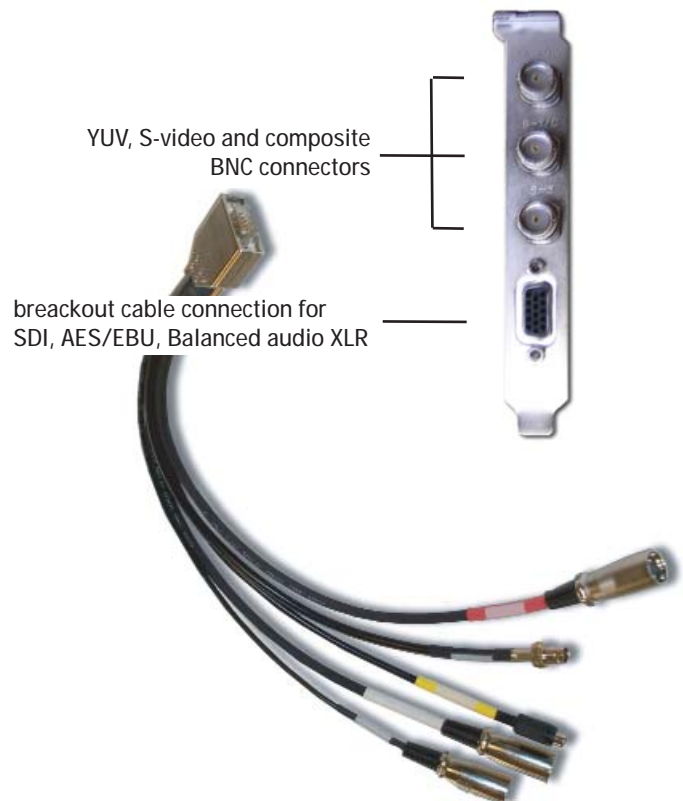
<b>Recommended configuration</b>	P4 - 3,4 GHz, 256 MB RAM
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<b>Developers resources : Operating System</b>	Windows XP, 2000
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<b>PCI compliance</b>	PCI 2.2 5V (and 3V3 on request)
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<b>Size : dimensions of the board</b>	167 x 100 mm (6,57" x 3,94")
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<b>Power consumption</b>	7,3 W (typical)
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