



SE-5100/5150

AVC Multi-Format Video Encoder



High Performance MPEG-4 AVC HD/SD Receiver Encoder for VBR and CBR Applications

Highlights Include:

- A real-time, full resolution High Definition and Standard Definition AVC video encoder
- Support for Main Profile Encoding @ Level 4 for HD services and Main Profile @ Level 3 for SD services
- Multi-pass CBR encoding
- Input flexibility
 - Baseband SDI/HD-SDI (selectable HD/SD)
 - MPEG-2/UDP/IP compressed input
 - Off air RF input (on SE-5150)
- Integrated low resolution proxy (PIP)
- Motion Compensated Noise Reduction (MCTF) in SD mode for enhanced video quality
- Constrained Fidelity (CF-CBR) capped VBR mode
- Statistical multiplexing capability
- Microsoft® Mediaroom™ conformance tested
- Ad insertion support
- Digital Turn Around for MPEG-2 inputs
- SNMP interface
- Web browser interface

For more information regarding any of these features contact your Motorola sales representative.

This HD/SD platform combines receiver functions with advanced encoding technology to deliver CBR and VBR video services at exceptionally low bit rates. In addition to supporting baseband video, the compact 1RU platform offers support for analog off air, ATSC digital terrestrial and direct MPEG-2 inputs.

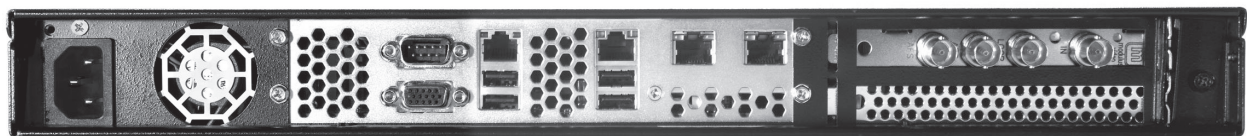
The receiver functions dramatically enhance headend architectures, reducing box count, simplifying signal routing and redundancy support. This IP centric platform delivers flexibility, value and exceptional video quality from its advanced multi-pass encoding system. The rich feature set includes HD upgrade option, support for statistical multiplexing over an IP infrastructure, highly efficient HE-AAC audio plus Constrained Fidelity CBR, a capped VBR mode for IPTV environments.

Additionally, the platform offers a low resolution proxy output stream for program guide or monitoring applications. This Linux based platform offers an ASI option for the SE-5100 and is ideal for demanding CBR and VBR applications.

SPECIFICATION SHEET

SE-5100/5150

TECHNICAL SPECIFICATIONS		Digital Audio Input	
MPEG-4 Features		Signal:	Serial digital AES
Motion Estimation:	Supports P, B & reference B frames 16x16 and 8x8 block sizes 1/4 Pixel motion estimation Weighted prediction	Connector:	BNC, female
Noise Reduction:	SD Motion Compensated Temporal Filter (MCTF)	Number:	2
Rate Control:	Multi pass encoding with CBR, VBR, and CF-CBR rate control Dynamic GOP - adaptive B frame (SD mode) Selectable GOP structure	Compressed Stream Output	
Coding:	CABAC entropy coding	Ethernet:	3 Gigabit, 1 10/100, RJ-45
Other:	De-blocking filter	IP:	Unicast or Multicast Main plus PIP on SPTS MPEG-2/UDP/IP
Video Processing		ASI Output:	2 (Optional), BNC, female
Input:	HDSDI per SMPTE-292M SDI per SMPTE-259M	H.264:	MPEG-2 Transport Stream over UDP/IP SCTE35 ad-insertion splice points from SCE104 inputs MPEG-2 input - Digital turn around over UDP/IP
Formats:	1080i/29.97; 720p/59.94 1080i/25; 720p/50 (HD) 625i/50; 525i/29.97 (SD)	Control and Status	
Embedded Audio:	per SMPTE-272M/-299M 4 stereo pairs	Type:	Browser interface for single unit control SNMPv2 with published MIB Linux operating system
MPEG-4 Profile:	Main; Level 4 (HD) Main; Level 3 (SD) Low resolution proxy (PIP)	Physical	
Receiver Inputs		Width:	18.9" (48cm)
	MPEG-2/UDP/IP ATSC digital terrestrial NTSC with GCR ghost cancellation	Depth:	15.5" (39.4cm)
Audio Processing		Height:	1RU, 1.75" (5cm)
Mode:	MPEG-1 Layer 2 HE-AAC (v2) audio encoding Dolby® Digital pass-through Dolby Digital 2.0 (optional 2 stereo pairs) BTSC audio extraction and SAP from NTSC input	Weight:	14 lb
Ancillary Signal Support		Packaged Weight:	20 lb
Signals:	L21 EIA 608, EIA 708 closed captioning, Teletext	Power:	115-230V (continuous), 47-63Hz
Digital Video Input		Power Consumption:	less than 100W
Signal:	Serial digital per SMPTE-292M (HD) Serial digital per SMPTE-259M (SD)	Cooling air:	front to rear
Connector:	BNC, female	Temperature:	to 40C
Number:	1	Other	
		Limited Warranty: One year	
		Compliance:	FCC, CE, UL, RoHS and TUV
		Ordering	
		SE-5100	shown below
		SE-5100A	ASI output
		SE-5150	RF input
		Ordering Options	
		SE-DD2	Two stereo pairs Dolby Digital 2.0
		SE-HDVBR	HD StamuxIP support

**MOTOROLA**

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