

## SE-5011/5050

## AVC Multi-Format Video Encoder



High Performance MPEG-4 AVC HD/SD Receiver Encoder for 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)
  - IP and ASI inputs
  - Off air RF input (on SE-5050)
- Low power, 1RU chassis
- Motion Compensated Noise Reduction (MCTF) in SD mode for enhanced video quality
- Monitoring thumbnail
- Ad insertion support
- Four Ethernet ports
- Digital Turn Around for MPEG-2 inputs
- Down conversion HD to SD (AFD per S2016-1-2007)
- Trace Feature
- Closed Captioning and Parental Control monitoring
- SNMP interface with published MIB

Web browser interface

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

This high definition platform combines receiver functions with advanced encoding technology to deliver CBR 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 multipass encoding system. This Linux based platform is ideal for demanding CBR applications.

**TECHNICAL SPECIFICATIONS** 

**MPEG-4 Features** 

Motion Estimation: Supports P, B & reference B frames

16x16 and 8x8 block sizes 1/4 Pixel motion estimation Weighted prediction

Noise Reduction: SD Motion Compensated Temporal Filter

(MCTF)

Rate Control: Multi pass encoding with CBR rate control

Dynamic GOP - adaptive B frame (SD

mode)

Selectable GOP structure CABAC entropy coding

Other: De-blocking filter

**Video Processing** 

Coding:

Input: HDSDI per SMPTE-292M

SDI per SMPTE-259M MPEG-2/UDP/IP

MPEG-2/ASI

Formats: 1080i/29.97; 720p/59.94

1080i/25; 720p/50 (HD) 625i/50; 525i/29.97 (SD)

Embedded Audio: Per SMPTE-272M/-299M

4 stereo pairs

MPEG-4 Profile: Main; Level 4 (HD) Main; Level 3 (SD)

Receiver Inputs (SE-5050 only)

ATSC digital terrestrial

NTSC with GCR ghost cancellation

**Audio Processing** 

Mode: MPEG-1 Layer 2

Dolby® Digital pass-through

Dolby Digital 2.0 (optional 2 stereo pairs)

**Ancillary Signal Support** 

Signals: L21 EIA 608, EIA 708 closed captioning,

Teletext

**Digital Video Input** 

Signal: Serial digital per SMPTE-259M (SD)

Serial digital per SMPTE-292M (HD)

Connector: BNC, female

Number: 1

**Digital Audio Input** 

Signal: Serial digital AES Connector: BNC, female

Number: 2

**Compressed Stream** 

**Output** 

Ethernet: 3 Gigabit, 1 10/100, RJ-45

IP: Unicast or Multicast

Main plus PIP on SPTS MPEG-

2/UDP/IP

H.264: MPEG-2 Transport Stream over

UDP/IP

SCTE35 ad insertion splice points

from SCTE104 input

MPEG-2 input - Digital turn around

over UDP/IP

**Control and Status** 

Type: Browser interface

SNMPv2 with published MIB Linux operating system

**Physical** 

 Width:
 18.9" (48cm)

 Depth:
 15.5" (39.4cm)

 Height:
 1RU, 1.75" (5cm)

Weight: 14 lb Packaged Weight: 20 lb

Power: 115-230V (continuous), 47-63Hz

Power Consumption: Less than 100W Cooling Air: Front to rear Temperature: to 40C

Other

Limited Warranty: One year

Compliance: FCC, CE, UL, RoHS and TUV

Ordering

SE-5011 Shown below SE-5050 RF input

**Ordering Options** 

SE-HD2SD HD to SD Down Conversion

SE-DD2 Two stereo pairs Dolby Digital 2.0





