



Features

- Compliant with MPEG-2 / MPEG-4 standard
- MPEG 1 layer-II audio encoding
- NTSC/PAL SD video format
- SMPTE-296/SMPTE-274 HD video format
- TS/IP Unicast and multicast output
- HDMI, HD/ SD-SDI, YPbPr, CVBS inputs
- Digital SPDIF audio input
- Dolby AC-3 audio encoding (optional)
- Supports multiplexing of MPEG-4 video & audio compressed data streams with DVB packing
- Supports SD or HD TS stream output with corresponding definition of input signal
- SI related editing table
- IP output compliant with UDP/RDP protocol
- Configuration and monitoring through front panel or SNMP network manager.

Applications

- IPTV Broadcast Systems
- HDTV Headend Conversion
- MDU Video Distribution
- Digital Signage & Kiosk Displays

High-Definition MPEG 4 (H.264 AVC) Video / Audio Encoding

EMCORE's HDE-M4-1-RM is an advanced high-performance MPEG-4 encoder. It is capable of converting high definition video with audio onto CATV or IPTV networks.

The HDE-M4-1-RM supports input formats such as HDMI, HD-SDI, SDI, YPbPr, CVBS, SPDIF and analog audio. Algorithm and compression efficiency improvements deliver crisp and vibrant video and audio at extremely low bit rates. Multicasting along with an adjustable bit rate are just a couple of the features that allow delivery of more HD/SD video and audio channels in the available bandwidth.

The user-friendly HDE-M4-1-RM encoder is an ideal solution for signal conversion and distribution over IP for the most demanding broadcast or IPTV applications.

System Design

Enclosed in a ruggedized aluminum housing, the HDE-M4-1-RM is perfectly suited towards applications that are space constrained and require equipment with lower power consumption and heat output. The front faceplate has push-button controls for configuration as well as status LED's. SNMP network management support allows remote interfacing for control and system diagnostics.

HDE-M4-1-RM

Video & Audio IP Encoder



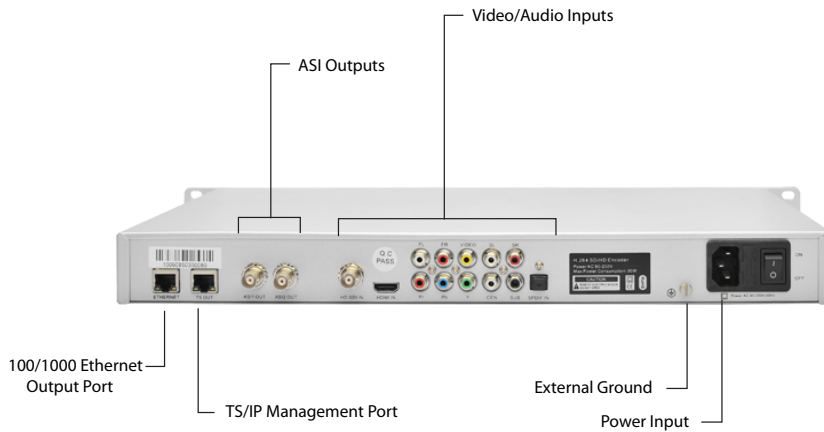
DATASHEET

IP ENCODING & DECODING

Models

Model	Description
HDE-M4-1-RM	MPEG-4 (H.264/AVC) Video/Audio Encoder, 1RU Rackmount

Connection Diagram



Inputs

Specifications	Values
Video	HDMI(1080i HDCP), HD/SD-SDI, YPbPr, CVBS
Audio	SPDIF, RCA, SDI and HDMI embedded audio

Outputs

Specifications	Values
DVB-ASI	2 ports, BNC connector
TCP/IP	100/1000 Ethernet, RJ-45 connector

Video Encoding

Specifications	Values
Compression	MPEG-4/H.264 AVC High Profile @ Level 4.0
Resolutions	1920 x 1080i @ 60/50 Hz 1440 x 1080i @ 60/50 Hz 1280 x 720p @ 60/50 Hz 720 x 576i @ 50 Hz 720 x 480p @ 60 Hz
Bit Rate	SD (2 to 20 Mbps), HD (6 to 20 Mbps)
SD Format	NTSC, PAL, SECAM
Broadcast Type	Unicast & multicast

Audio Encoding

Specifications	Values
Compression	MPEG-1 Layer II Supporting stereo audio
Sampling	48 KHz
Channels	2 analog (mono or stereo) / 1 SPDIF

General

Specifications	Values
Input Power	90~250 VAC, 50/60 Hz
Power Consumption	30 Watts (max)
Weight	11lbs (5kg)
Dimensions	1.73" (1RU) H x 19" W x 10.79" D (44mm x 484mm x 274mm)
Operating Temperature	32 - 113° F (0 - 45° C)
Operating Humidity	10% - 80% Relative Humidity
Storage Temperature	23 - 122° F (-5 to 50° C)
Storage Humidity	0% - 90% (non-condensing)

Monitoring & Control

Specifications	Values
Front Panel	Keyboard, LCD display, Status LED's
Remote	TS/IP, Network management software for full control & system diagnostics

Compliance

