



- **Digital RF Encoder for Home, Hotels and SMBs**
- **MPEG 4 / H.264 -Encoding**
- **Audio Video Input**
- **CVBS/YPbPr/S-Video Formats**
- **DVB-T Modulation**
- **Digital RF Output**
- **30 ~ 960 MHz**
- **Local Control with LCD Display**

Ascent's EM1401 HD & SD Encoder & Modulator is designed based on consumer electronics which allow for an audio/video signal input in TV distributions. It has applications in home entertainment, surveillance control, hotel digital signage, shops, and more.

The EM1401 is an all-in-one device integrating MPEG-4 AVC/H.264 encoding and modulating to convert audio/video signals to a DVB-T RF output.

The signals source can be from STBs, satellite receivers, closed-circuit television cameras, or antennas. The output signal can be received by DVB-T standard TVs or STBs.

Specifications

HDMI Encoding Section

| | | | |
|--------------|---------------------|---------------------------------|------------------|
| Video | Encoding | H.264 MP@L 3.0 / 3.1 / 4.0 | |
| | Interface | HDMI × 1 | |
| Resolution | | Input | Output |
| | | 480@59.94/60p | 480@60p |
| | | 480@59.94/60i | 480@30p |
| | | 576@50i | 576@25p |
| | | 720@50/59.94/60p | 720@50/59.94/60p |
| | | 1080@50i | 1080@25p |
| | | 1080@59.94/60i | 1080@30p |
| | | 1080@59.94/60p | 1080@30p |
| Aspect Ratio | 16:9 | | |
| Bit rate | 1.000 ~ 18.000 Mbps | | |
| Audio | Encoding | MPEG1 layer 2 | |
| | Sample rate | 48 kHz | |
| | Bit rate | 64, 96, 128, 192, 256, 320 kbps | |

CVBS Encoding Section

| | | | |
|--------------|---------------------|---------------------------------------|---------------|
| Video | Encoding | H.264 MP@L 3.0 | |
| | Interface | CVBS × 1 (RCA) | |
| Resolution | | Input | Output |
| | | 480@60p | 480@60p |
| | | 480@60i | 480@30p |
| | | 576@50p | 576@50p |
| | | 576@50i | 576@25p |
| Aspect Ratio | 4:3 | | |
| Bit rate | 1.000 ~ 18.000 Mbps | | |
| Audio | Encoding | MPEG1 layer 2 | |
| | Interface | Analog stereo / mono (unbalanced RCA) | |
| | Sample rate | 48 kHz | |
| | Bit rate | 64, 96, 128, 192, 256, 320 kbps | |

DVB-T Modulator Section

| | |
|--------------------|-----------------------------|
| Standard | DVB-T COFDM |
| Bandwidth | 6M, 7M, 8M |
| Constellation | QPSK, 16QAM, 64QAM |
| Code rate | 1/2, 2/3, 3/4, 5/6, 7/8 |
| Guard Interval | 1/32, 1/16, 1/8, ¼ |
| Transmission Mode: | 2K, 8K |
| MER | ≥ 31dB |
| RF frequency | 142.5 ~ 946 MHz, 1 kHz step |
| RF output level | -14 ~ +6dBm, 0.1 db step |

System

| | |
|--------------------------|-----------------------------|
| RF mix in ATT Management | 10 dB |
| Language | Local LCD + control buttons |
| LCN Insertion | English |
| Upgrade | Yes |
| | USB |

General

| | |
|--------------|------------------|
| Power supply | DC 12V |
| Dimensions | 183 × 110 × 50mm |
| Weight | < 1 kg |

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