**Features**

**High integration, portable, low consumption, high performance**
E1, small size of 125mm*89mm*28mm, integrates FPGA, video co-processor and video encoding chip. It supports 10/100M self-adaptive Ethernet interface. E1 can support 1080p60 Full HD video encoding, meanwhile open up to 960x540@60Hz sub-stream encoding. Under typical case, overall power consumption is <=4W.

**Low bit rate assuring nice image and quality audio**
E1 adopts VLB (Very Low Bit Rate) H.264 video encoding technology, bonding with preceding video processor to do video dynamic noise reduction, image enhancement, etc. Generally, 1Mbps@720p, 1.5Mbps@1080p can achieve good video encoding quality, which meet needs of low bit rate and quality image under internet applications.

**Powerful streaming media protocols supported and full service function**
E1 is built in SUNSHINE streaming media engine, fully support RTP/RTSP/RTMP/ HLS/TS. Through protocols like RTMP/TS and other, it could push live video to many global live video platform/CDN. E1 itself is light-weight streaming media server, which can allow 20~50 concurrent users to access simultaneously.

**Easy operation and professional quality.**
E1 allows you to use Web interface to manage device. Using and setting is very easy. It is widely used in broadcast and TV, interactive media, medical, network education, secure safety and other fields, professional and stable.

**NDI®**
NDI allows system, devices and applications to identify and communicate bi-directionally with one another over IP, and to encode, transmit, and receive multiple streams of high quality, low latency, frame-accurate video and audio in real time. Integrated into thousands of products in the hands of millions of users, NDI is the leading standard for IP video production.

**Other features**
- Supported global live video platform (tested): YouTube, UStream, Twitch and so on.
- Supported streaming media server platform/CDN system (tested): Wowza, FMS, RED5, SR5, etc.
- Local storage and recording based on Micro SD/TF card and/or USB Storage.
- Support image rotation, cutting, gray scale and other special image processing.
- Support character/image overlay.
- Support quick function customization based on customers’ needs (Please contact salesman and factory technical support).
- Two-way voice intercom function (based on factory provided solutions or for customization according to applications requirements).
### Main parameters

#### Interface
- **Video input**: 1*BNC SDI
- **Video looping out**: 1*BNC SDI
- **Analog video input**: 1*3.5mm
- **Analog video output**: 1*3.5mm
- **Wired network**: 1*RJ-45, 10/100M self-adaptive Ethernet, built-in model, external dual antenna
- **Wi-Fi**: 1*USB 2.0 Type-A
- **USB**: 1*USB 2.0 Mini-USB

#### Network support
- **Ethernet**
- **Network support**

#### Signal and formats
- **SDI signal standard**: 0.8Vp-p
- **SDI impedance**: 75 Ohm
- **SDI coupling way**: AC
- **SDI signal formats**
  - HD-SDI: 1.485Gbps
  - 3G-SDI: 2.97Gbps
- **Supported video formats**
  - 1080p: 23.98/24/25/29.97/30
  - 1080p: 50/59.94/60
  - 1080i: 50/59.94/60
  - 720p: 23.98/24/25/29.97/30
  - 720p: 50/59.94/60, 576i, 480i
  - 525i (480i) / 625i (575i)
- **Audio**
  - SDI unbind audio (stereo)
  - Analog Line-in/Line-out (stereo)

#### Encoding
- **Video encoding**: H.264/AVCHigh profile (up to level 5.1), compatible with Main profile and Baseline
- **Audio encoding**: AAC/MPEG4-Audio, G.711(u-Law/a-Law) [other algorithm can be extended]
- **Encoding delay**: ≤67ms
- **Video encoding bitrates**: 256Kbps ~ 25Mbps adjustable
- **Audio encoding bitrates**: 32Kbps ~ 512Kbps : AAC64Kbps : G.711

#### Transmission protocols and Management protocols
- **Transmission protocols**: RTP / RTSP (compatible RTP over RTSP, RTSP HTTP Tunnel and RTSP Multicast), RTMP pushing, RTMP service, TS over UDP, HLS
- **Private protocol**: KMP (KILOVIEW Media Protocol)
- **Control/management protocol**: Onvif 1.1/2.0, KCP (KILOVIEW Control Protocol), WindTalk compatible with (private) protocols
- **Management protocol**: HTTP

#### Management ways
- **Management interface**: Web
- **Remote management**: Support
- **Online firmware updating**: Support

#### Working environment
- **Power**: DC 12V 1A
- **Operating temperature**: -4 to 140° F / -20 to 60° C
- **Relative humidity**: 20 ~ 90%RH(un condensation)
- **Power consumption**: 4W Max

#### Size and accessories
- **Size**: 4.9 x 3.5 x 1.125” / 125 x 89 x 28 mm
- **Weight**: 13.4oz / 380g
- **Power adapter**: External DC 12V 1A adapter

### Product appearance