HE-1101

Architectural and Engineering Specifications

Version 1.1

(June. 08, 2021)

**PART 1: PLEASE REFER TO ATTACHED DOCUMENTS - OVERVIEW & FORMAT SAMPLES**

**PART 2: PRODUCTS**

**Division 27 – Communications**

**Level1 27 20 00 – Data Communications**

**Level2 27 24 00 – Data Communications Peripheral Data Equipment**

**Level3 27 24 23 – Audio – Video Devices**

# Manufacturer

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# General

### Product Description

HD-1101 is an Encoder designed and manufactured by IDIS. This Encoder allows operators to view and control multiple applications all from a single monitor, keyboard, and mouse by simply connecting hardware and systems that have a VGA or HDMI output. This Encoder supports Full HD (1920x1080) resolution at 30ips (image per second) with H.265, H.264 and MJPEG compression. This Encoder is equipped with PoE (IEEE 802.3af Class 2), and 3.5mm Audio I/O.

### General Specification

1. HDMI/VGA Video Encoder shall be equipped with 10/100 Base-T, RJ45 Ethernet connection.
2. HDMI/VGA Video Encoder shall support industry standard Power over Ethernet (PoE) IEEE 802.3af, Class 2 to supply power to the camera over the network and 12VDC input.
3. HDMI/VGA Video Encoder shall deliver maximum video resolution of 1920x1080 at rates up to 30ips

(Images per second).

1. HDMI/VGA Video Encoder shall provide direct network connection using H.265, H.264 and M-JPEG compression.
2. HDMI/VGA Video Encoder shall support Quadruple Streams.
3. HDMI/VGA Video Encoder shall conform to the ONVIF\*\* Profile S.
4. HDMI/VGA Video Encoder shall be equipped with embedded web server (IDIS Web) which works independently using a Web Browser with ActiveX plug-in.
5. HDMI/VGA Video Encoder shall have network bandwidth limitation and MAT (Motion Adaptive Transmission) features for more efficient use of network bandwidth.
6. HDMI/VGA Video Encoder shall have Event Trigger: Motion & Audio Detection, Active Tampering Alarm, Trip-zone, Video Loss and System Event.
7. HDMI/VGA Video Encoder shall upload the .jpg image of the event detected to a FTP server.
8. The IP camera shall have Easy network access via UPnP (Universal Plug and Play) function and embedded mDNS (Multicast DNS) protocol.

### Protocol Specification: DirectIP 2.0

1. The IP camera shall have DirectIP 2.0 mode.
2. DirectIP 2.0 protocol shall provide easy connection to DirectIP NVR for automatic discovery and video streaming configuration.
3. DirectIP 2.0 shall provide the compatibility with IDIS Solution Suite VMS or ONVIF for third-party software solutions.
4. DirectIP 2.0 shall support camera can be linked to IDIS software solution such ad IDIS Center and IDIS Solution Suite, or 3rd party solution while it is being connected to a DirectIP NVR.
5. DirectIP 2.0 camera shall be compatible with DirectIP 1.0 NVR as well as DirectIP 2.0 NVR.
6. DirectIP 2.0 camera shall be unavailable for No-password login when connecting to DirectIP 2.0 NVR and IDIS Software Solutions.
7. DirectIP 2.0 protocol shall provide Quadruple streams.
8. DirectIP 2.0 protocol shall support H.264 and H.265 and M-JPEG compression.

### Technical Specification

### Supported Input Resolution

1. Video Resolution:
	1. HDMI (14ea): 1920x1080, 1600x1200, 1600x900, 1440x900, 1366x768, 1360x768, 1280x960, 1280x800, 1280x768, 1280x720, 1024x768, 800x768, 720x480
	2. VGA (9ea): (VESA) 1920x1080, (VESA) 1600x1200, (VESA) 1440x900, (VESA) 1360x768, (VESA) 1280x1024, (VESA) 1280x800, (VESA) 1280x720, (VESA) 1024x768, (VESA) 800x600
2. Scanning Mode: Progressive Scan
3. Input Frame Rate: 60 fps (Only 30 of 60 frames are encoded)

### Encoding Specification

1. Video resolution: 1920x1080, 1280x720, 704x480, 640x360, 352x240
2. Maximum Resolution: 1920x1080
3. Maximum Frame Rate: 30ips @ 1920x1080
4. Video Compression : H.265, H.264, M-JPEG
5. Video Compression Level: Basic, Standard, High, Very High
6. Multi-Video Streaming: Quadruple streams
7. Video In/Out: 1 HDMI and 1 VGA / 1 HDMI (Input Bypass) and 1 VGA (Input Bypass)
8. HDMI/VGA Video Encoder shall support IP camera protocol for DirectIP 2.0
9. Intelligent Video Analytic: Video Motion Detection, Active Tampering Alarm

### Audio Specification

1. Audio Compression Algorithm: G.726 (16KHz), G.711 u-Law (8KHz), and ADPCM (16kHz)
2. Audio Input / Output: Line-in 1ea (3.5mm) / Line-out 1ea (3.5mm)

### Network Specification

* + - 1. Port: RJ-45 10/100 Base-T 1 port
			2. Network Protocols: DirectIP 2.0 Protocol, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/UDP RTSP/TCP, HTTP, HTTPS, FTP, SNTP, SMTP, FEN, mDNS, Upnp
			3. Streaming Mode: Quadruple streaming

### Security Specification

1. SSL Encryption, Multi-user Authority, IEEE 802.1x IP Filtering, HTTPS, SSL Encryption
2. Maximum User Access: IDIS protocol mode: 10 (Live+Admin), 1 (Recording), and 1 (Search).

### Event Specification

1. Trigger Events: Motion detection, Audio detection, Tampering, Trip Zone, Video Loss, and System Event.
2. Event Notification: Remote Software, Email (with Image), FTP (upload with Image)
	1. Encryption type: SSL,STARTTLS

## Environmental Specification

1. Operating Temperature: 0°C ~ 40°C (32°F ~ 104°F)
2. Operating Humidity: 0% to 90% non-condensing

## Electrical Specification

1. Power Source: 12VDC, PoE (IEEE 802.3af class 2)
2. Power Consumption: 5.52W
3. Regulatory Approvals: FCC, CE, KC

## Mechanical Specification

1. Dimensions (W x H x D): 200mm x 44mm x 153mm (7.9” x 1.7” x 6.0”)
2. Unit Weight: 780g (1.72 lb)

# Version History

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| --- | --- | --- | --- |
| **Version** | **Writer** | **Revision Date** | **Remarks** |
| 1.1 | TS Team | Jun. 08, 2021 | Spec Update |
| 1.0 | Suji Park | July. 13, 2018 | Initial Release |