DD-1216

Architectural and Engineering Specifications

Version 1.0

(Dec 5th, 2018)

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# Manufacturer

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# General

## Product Description

DD-1216 is a video decoder designed and manufactured by IDIS. The video decoder is powered by PoE and provides live video compression and video transmission over Ethernet connections. The device supports 16 composite video output connectors such as HDMI, VGA, and CVBS, and compresses video with H.264 and H.265 codec. The decoder has one RJ-45 connector and the connector support 10/100/1000 BASE-T.

## General Specification

1. The switch shall support 16 composite video output connectors.
2. The switch shall support 1 RJ-45 10/100/1000 BASE-T.
3. The switch shall support H.264 and H.265 algorithm.
4. The switch shall support DirecIP NVR, IDIS Cameras
5. The switch shall support up to 3840x2160 output resolution.
6. The switch shall support up to 9 FHD display or up to 16 channel real-time display.

## Protocol Specification: DirectIP Protocol and IDIS Protocol

### The video decoder supports DirectIP NVRs and IDIS cameras in both DirectIP and IDIS protocol.

### DirectIP Protocol

1. DirectIP protocol shall provide easy connection to DirectIP NVR for automatic discovery and video streaming configuration.
2. DirectIP protocol shall provide Quadruple streams.
3. The bitrate shall be automatically adjusted by recording profile of DirectIP NVR.
4. DirectIP protocol shall support H.265 and H.264 only as primary compression.

### IDIS Protocol

1. IDIS protocol shall provide the compatibility with IDIS Solution Suite VMS or ONVIF for third-party software solutions.
2. IDIS protocol shall provide Quadruple streams.
3. IDIS protocol shall support H.265, H.264 and MJPEG compression.

# Technical Specification

## Hardware specifications

1. CPU: Hi3536
2. System Memory: 3GB
3. USB port: 2 USB 2.0 ports

## Network Specifications

1. Copper Service Port: 1 RJ-45 Connector(10BASE-T, 100BASE-TX, 1000BASE-T)
2. Network throughput: Max. 90Mbps
3. Network Protocol: TCP, UDP, SNTP, mDNS,

## Security Specification

1. SSL Encryption

## Power over Ethernet

1. IEEE 802.3af class 3 compliant
2. Power to application over Ethernet cabling
3. Power feeding over 4/5 & 7/8 data twisted.

## Decoding specification

### Display resolution

1. HDMI: 3840x2160, 2560x1440, 1920x1200, 1920x1080, 1680x1050, 1600x1200, 420x480, 720x576
2. VGA: 3840x2160, 2560x1440, 1920x1200, 1920x1080, 1680x1050, 1600x1200, 420x480, 720x576
3. CVBS: 640x480

### Decoding capability

1. Up to 9 FullHD display
2. Up to 16 channel real-time display
3. Up to 480 ips (16ch x 30ips)
4. Bitrate control: VBR

## Electrical Specifications

1. Power Consumption: 12.7W
2. Power Input: DC12V(Terminal block), 1.03A, 50/60Hz
3. Regulatory Approvals:
	1. Electrical: FCC, CE, KC

## Mechanical Specifications

1. Unit Dimensions (W x H x D): 200mm x 44mm x 153mm (7.9" x 1.7" x 6.0")
2. Unit Weight: 0.78kg (1.72lb)
3. Weight with packaging: 1.11kg

## Environmental Specifications

1. Operating Temperature: 0°C to 40°C (32℉ ~ 104℉)
2. Operating Humidity: 0 ~ 90%

# Version History

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| --- | --- | --- | --- |
| **Version** | **Writer** | **Revision Date** | **Remarks** |
| 1.0 | Glen Oh | Dec, 5th, 2018 | Initial Release |