DC-V3213XJ-4.3mm

Architectural and Engineering Specifications

Version 1.0

(Feb. 26, 2018)

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

**PART 2: PRODUCTS**

**Division 28 – Electric Safety and Security**

**Section 28 23 29 – Video Surveillance Remote Devices and Sensors**

## Manufacturer

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## General

### Product Description

DC-V3213XJ-4.3mm is a Network Camera (IP Camera) designed and manufactured by IDIS. This camera provides Full HD (1920x1080) resolution at 30ips (images per second) with H.265/H.264/M-JPEG compression. This camera is equipped with Fixed-focal lens, True Day/Night, PoE (IEEE 802.3at Class 4), IR LED, Audio I/O, and Alarm I/O.

### General Specification

1. The IP camera shall be equipped with 2 Megapixel 1/2.9” CMOS Sensor.
2. The IP camera shall be equipped with 4.3mm Fixed-focal lens, F2.0.
3. The IP camera shall support electrical True day/night for low light performance.
4. The IP camera shall have True Wide Dynamic Range compensation for improved video quality in high-contrast situations (120dB).
5. The IP camera shall utilize configurable 3DNR (Dynamic Noise Reduction) technology to reduce the bitrate and storage requirements by removing noise artifacts.
6. IP camera shall be equipped with 10/100 Base-T, auto-sensing, half/full duplex, RJ45 Ethernet connection.
7. The IP camera shall support industry standard Power over Ethernet (PoE) IEEE 802.3at, Class 4 to supply power to the camera over the network and 12VDC input.
8. The IP camera shall have video out feature (NTSC/PAL).
9. Using IDIS NLTSrec(Non-Linear Time Shifting recording) technology, the IP camera can store the recording data to the internal recording memory buffer (60MB) in camera if there is a delay in data transmission due to the instantaneous load of the recorder or network, and then transmits the stored data to IDIS recorder safely.
10. The IP camera shall deliver maximum video resolution of 1920x1080 at rates up to 30ips

(Images per second).

1. The IP camera shall provide direct network connection using H.265, H.264 and M-JPEG\*\* compression (\*\* IDIS Protocol only).
2. The IP camera shall support Quadruple Streams in DirectIP protocol mode.
3. The IP camera shall support Quadruple Streams in IDIS protocol mode.
4. The IP camera shall conform to the ONVIF\*\* Profile S.
5. The IP camera shall be equipped with embedded web server (IDIS Web\*\*) which works independently using a Web Browser with ActivX plug-in (\*\* IDIS Protocol only).
6. The IP camera shall have IP filtering, HTTPS, SSL, IEEE 802.1X, and configurable user authority levels for greater security.
7. The IP camera shall have network bandwidth limitation and MAT features for more efficient use of network bandwidth.
8. The IP camera shall have Easy network access via UPnP (Universal Plug and Play) function and embedded mDNS (Multicast DNS) protocol.
9. The IP camera shall have Intelligent Video Analysis (VA): Motion Detection, Audio Detection, Alarm-in, Active Tampering Alarm and Trip Zone.

### Protocol Specification: DirectIP and IDIS Protocol

1. The IP camera shall have 2 protocol modes, DirectIP and IDIS Protocol, and DirectIP is set as main protocol by default.
2. The protocol modes shall be selectable between DirectIP and IDIS protocol mode to meet specific needs with IDIS Discovery tool.
	* 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 M-JPEG compression.

## Technical Specification

### Video Specification

1. Image Sensor: 1/2.9" CMOS
2. Maximum Resolution: 1920 x 1080
3. Scanning Mode: Progressive Scan
4. Lens Type: Fixed-focal (f= 4.3mm, F2.0)
5. IRIS Control: Fixed-Iris
6. Angular Field of View (H: Horizontal, V: Vertical, D:Diagonal):83º(H), 47º(V), 95º(D)
7. Minimum Illumination:
	1. COLOR : 0.1 lux
	2. B/W : 0.01 lux
8. S/N Ratio: More than 45dB
9. Maximum Frame Rate: 30ips @ 1920x1080
10. Video Resolution:
	1. DirectIP protocol mode: 1920x1080, 1280x720, 704x480, 640x360, 352x240
	2. IDIS protocol mode: 1920x1080, 1280x720, 704x480, 640x360, 352x240
11. Video Compression : H.265, H.264, M-JPEG\*\* (\*\* IDIS Protocol only)
12. Video Compression Level: Basic, Standard, High, Very High
13. Multi-Video Streaming:
	1. DirectIP protocol mode: Quadruple streams
	2. IDIS protocol mode: Quadruple streams
14. Dynamic Range: 120dB
15. True Day & Night: Electrical D/N
16. Intelligent Video Analytic: Motion Detection, Audio Detection, Alarm-in, Active Tampering Alarm and Trip Zone

### Audio Specification

1. Audio Compression Algorithm: G.726 (16KHz), G.711 u-Law (8KHz), G.711 a-Law (8KHz)
2. Audio Input / Output: Line-in 1ea / Line-out 1ea
3. Two-way Audio Communication: Yes
4. Pre-recorded Voice Alert: Yes

### Network Specification

1. Port: RJ-45 10/100 Base-T 1 port
2. Network Protocols:
	1. DirectIP Protocol Mode
	2. IDIS Protocol Mode: RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/UDP, RTSP/TCP, HTTP, HTTPS, FTP, SNTP, SMTP, FEN, mDNS, uPNP
3. Streaming Mode: Unicast, Multicast

### Security Specification

1. DirectIP Protocol Mode: SSL Encryption
2. IDIS Protocol Mode: Multi-User Authority, IEEE 802.1x, IP Filtering, HTTPS, SSL Encryption
3. Maximum User Access:
	1. DirectIP protocol mode: Direct camera access is unavailable.
	2. IDIS protocol mode: Live + Admin(10), Recording (1), Search (1)

### Alarm and Event Specification

1. Alarm Input / Output
	1. Alarm Input: TTL , NC,NO Programmable, 2.4V (NC) or 0.3V (NO) threshold, 5 VDC , Terminal Block
		* Choose between an NC (Normally Closed) type or an NO (Normally Open) type) Connect a mechanical or electrical switch to the alarm in port and the GND (ground) connector.
		* Alarm in range is 0V to 5V. In order to detect alarm input, the signal must be higher than 2.4V from an NC switch or less than 0.3V from an NO switch and must last for longer than 0.5 seconds.
	2. Alarm Output: 1 relay out, 0.25A @ 250Vac, 1A @30Vdc, Terminal Block
		* Connect a mechanical or electrical switch to the NO and the COM connector
2. Trigger Events: Motion Detection, Audio Detection, Alarm-in, Active Tampering Alarm and Trip Zone
3. Event Notification: Remote Software, Email (with Image)
	1. Encryption type: SSL

## Environmental Specification

1. Operating Temperature: -10°C ~ +50°C (+14°F ~ +122°F)
2. Operating Humidity: 0% ~ 90%

## Electrical Specification

1. Power Source: 12VDC, PoE(IEEE 802.3at class 4)
2. Power Consumption: 4.08W
3. Regulatory Approvals: FCC, CE, KC

## Mechanical Specification

1. Dimensions (W x H x D) - Main module: 153mm x 36.5mm x 132.7mm ( 6.02" x 1.44" x 5.22")
2. Dimensions (W x H x D) - Camera module: 39mm x 40mm x 25mm (1.54" x 1.57" x 0.98")
3. Unit Weight: 0.9 kg (1.98 lb)

# Version History

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| --- | --- | --- | --- |
| **Version** | **Writer** | **Revision Date** | **Remarks** |
| 1.0 | Glen Oh | Feb. 26, 2018 | Initial Release |