

# **DC-D4213RX (2.8mm)**

## **Architectural and Engineering Specifications**

Version 1.0  
(May. 29, 2019)

## 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

#### 2.1.0 Manufacturer

- 1.IDIS Co., Ltd.  
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#### 2.2.0 General

##### 2.2.1 Product Description

DC-D4213RX is a Indoor Dome type IP Camera designed and manufactured by IDIS. This camera provides Full HD (1920 x 1080) resolution at 30ips (images per second) with H.265, H.264, and M-JPEG compression. This camera is equipped with Motorized Focus/Zoom lens, IR LEDs, True Day/Night, PoE (IEEE 802.3af Class 2), Audio I/O, Alarm I/O, microSD/SDHC/SDXC card backup

##### 2.2.2 General Specification

1. The IP camera shall be equipped with 2 Megapixel 1/2.8" CMOS Sensor.
2. The IP camera shall be equipped with 2.8mm fixed-focal lens, F2.0
3. The IP camera shall be a true day/night camera with a mechanical filter for low light performance. The filter can be switched remotely, or automatically via a light level sensor or contact input (ICR).
4. The IP camera shall have wide dynamic range compensation (True WDR) for improved video quality in high-contrast situations (120 dB).
5. The IP camera shall have 4 IR LEDs looming 30 m(98.4 ft).
6. The IP camera shall support Fixed-Iris.
7. The IP camera shall utilize 2DNR/3DNR (Dynamic Noise Reduction) technology to reduce the bitrate and storage requirements by removing noise artifacts.
8. The IP camera shall be equipped with 10/100 Base-T, auto-sensing, half/full duplex, RJ-45 Ethernet connection.
9. The IP camera shall support industry standard Power over Ethernet (PoE) IEEE 802.3af, Class 2
10. The IP camera shall have on board microSD/SDHC/SDXC card backup storage slot as a safeguard against data loss during network interruptions.
11. 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.

12. The IP camera shall deliver maximum video resolution of 1920 x 1080 at rates up to 30ips (images per second).
13. The IP camera shall provide direct network connection using H.265, H.264 and MJPEG\*\* compression. (\*\* IDIS protocol only)
14. The IP camera shall support quadruple streams
15. The IP camera shall conform to the ONVIF\*\* Profile S Ver.2.4.0 standard. (\*\* IDIS protocol only)
16. The IP camera shall be equipped with embedded web server (IDIS Web\*\*) which works independently using a Web Browser with ActiveX plug-in. (\*\* IDIS Protocol only)
17. The IP camera shall have IP filtering, HTTPS, SSL, IEEE 802.1X, and configurable user authority levels for greater security.
18. The IP camera shall have network bandwidth limitation and MAT features for more efficient use of network bandwidth.
19. The IP camera shall have Easy network access via UPnP (Universal Plug and Play) function and embedded mDNS (Multicast DNS) protocol.
20. The IP camera shall have Intelligent Video Analysis (VA): Video Motion Detection, Active Tampering Alarm and Trip Zone.

### 2.2.3 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
    - A. DirectIP protocol shall provide easy connection to DirectIP NVR for automatic discovery and video streaming configuration.
    - B. DirectIP protocol shall provide quadruple streams.
    - C. The bitrate shall be automatically adjusted by recording profile of DirectIP NVR.
    - D. DirectIP protocol shall support H.264 and H.265 only as primary compression.
  - IDIS Protocol
    - A. IDIS protocol shall provide the compatibility with IDIS Solution Suite VMS or ONVIF for third-party software solutions.
    - B. IDIS protocol shall provide quadruple streams.
    - C. IDIS protocol shall support H.264, H.265 and MJPEG compression.

## 2.3.0 Technical Specification

### 2.3.1 Video Specification

1. Image Sensor: 1/2.8" CMOS
2. Maximum Resolution: 1920 x 1080
3. Scanning Mode: Progressive Scan
4. Lens Type: Fixed-focal (f=2.8mm, F2.0)
5. Iris Control: Fixed Iris
6. Angular Field of View (H: Horizontal, V: Vertical, D: Diagonal):
  - A. 113.7°(H), 61.5°(V), 134.5°(D)
7. Pan/Tilt Range: Pan: -170° ~ 170°, Tilt: -5° ~ 67.5°, Rotate: -109° ~ 109°
8. Minimum Illumination:
  - A. COLOR : 0.02 lux @ F2.0
  - B. B/W: 0 lux (IR LED ON)
9. S/N Ratio: more than 45 dB
10. Maximum Frame Rate: 30fps : 1920 x 1080(WDR)
11. Video Resolution:
  - A. 1920 x 1080, 1280 x 720, 704 x 480, 640 x 360, 352 x 240
12. Video Compression : H.265, H.264, MJPEG\*\* (\*\* IDIS Protocol only)
13. Video Compression Level: 4 levels: Basic, Standard, High, Very High
14. Multi-Video Streaming: Quadruple streams
15. Dynamic Range: True wide dynamic range(WDR)
16. True Day & Night: Yes (ICR)
17. IR Distance (The number of LEDs, IR wavelength): 20m/65.6ft (4ea)
18. Intelligent Video Analytic: Video Motion Detection, Active Tampering Alarm and Trip Zone
19. Analog Video Output: None

### 2.3.2 Audio Specification

1. Audio Compression Algorithm: ADPCM 16K, G.726, G.711 u-Law, G.711 a-Law
2. Audio Input / Output: 1(Built Mic) + 1 / 1
3. Two-way Audio Communication: Yes

### 2.3.3 Network Specification

1. Port: RJ-45 10/100 Base-T 1 port

2. Network Protocols:

- A. DirectIP Protocol, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/UDP RTSP/TCP, HTTP, HTTPS, FTP, SNTP, SMTP, FEN, mDNS, Upnp

### 2.3.4 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:
  - A. DirectIP protocol mode: Direct camera access is unavailable.
  - B. IDIS protocol mode: 10 (Live), 1 (Recording), 1 (Search), 2 (Admin)

### 2.3.5 Alarm and Event Specification

1. Alarm Input / Output: 1 / 1
  - A. Alarm Input: TTL, NC/NO Programmable, 4.3V(NC) or 0.3V(NO) threshold, 5V DC
  - B. Alarm Output: 1 TTL open collector, 30mA @ 5 VDC
2. Trigger Events: Motion Detection, Alarm in, Audio detection, Tampering and Trip Zone
3. Event Notification: Remote S/W, Email (with Image)
  - A. Encryption Type: SSL

### 2.4.0 Environmental Specification

1. Operating Temperature: -10°C ~ +50°C (+14°F ~ +122°F)
2. Operating Humidity: 0% to 90%
3. Vandal-proof Enclosure: None, Indoor Dome Camera

### 2.5.0 Electrical Specification

1. Power Source: PoE(IEEE 802.3af class 2)
2. Power Consumption: 4.8W
3. Regulatory Approvals: FCC, CE, KC

### 2.6.0 Mechanical Specification

1. Dimensions (Ø x H): Ø110 x 88mm
2. Unit Weight: 0.25kg(0.55lb)

## Version History

Version	Writer	Revision Date	Remarks
1.0	Roy Lee	May. 29, 2019	Initial release