IDIS

One Solution. One Company.

# DC-D3233WRX

# Architectural and Engineering Specifications

Version 1.1

(Sep. 26, 2017)



©2014 IDIS Co., Ltd. All rights reserved. IDIS and identifying product names and numbers herein are registered trademarks of IDIS Co., Ltd.
All non-IDIS brands and product names are trademarks of their respective companies.
Product appearance, build status and/or specifications are subject to change without notice.

**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.
   IDIS Tower, 344 Pangyo-ro, Bundang-gu
   Seongnam-si, Gyeonggi-do, 463-400, Korea
   Tel: +82 31 723 5400
   Fax: +82 31 723 5100

## 2.2.0 General

### 2.2.1 Product Description

DC-D3233X is a 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 3), Audio I/O, Alarm I/O, Vandal-proof dome enclosure design, IP66 rated, and microSD/SDHC/SDXC card backup.

### 2.2.2 General Specification

1. The IP camera shall be equipped with 2 Megapixel 1/3” CMOS Sensor.
2. The IP camera shall be equipped with 3.3mm - 10mm motorized Vari-focal lens, F1.3 - F2.5.
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 28 IR LEDs looming 20 m.
6. The IP camera shall support P-Iris.
7. The IP camera shall be vandal proof and IP rating 66 complied dome enclosure design.
8. The IP camera shall utilize 2DNR/3DNR (Dynamic Noise Reduction) technology to reduce the bitrate and storage requirements by removing noise artifacts.
9. The IP camera shall be equipped with 10/100 Base-T, auto-sensing, half/full duplex, RJ-45 Ethernet connection.
10. The IP camera shall support industry standard Power over Ethernet (PoE) IEEE 802.3af, Class 3 to supply power to the camera over the network and 12VDC input.
11. The IP camera shall have video out feature (NTSC/PAL).
12. The IP camera shall have on board microSD/SDHC/SDXC card backup storage slot as a safeguard against data loss during network interruptions.

13. The IP camera shall be equipped with recording stream buffer memory (60MB) to counter pre/post event buffering and network delays for improved network recording reliability.
14. The IP camera shall deliver maximum video resolution of 1920 x 1080 at rates up to 30ips (images per second).
15. The IP camera shall provide direct network connection using H.265, H.264 and MJPEG** compression. (** IDIS protocol only)
16. The IP camera shall support quadruple streams
17. The IP camera shall conform to the ONVIF** Profile S Ver.2.4.0 standard. (** IDIS protocol only)
18. 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)
19. The IP camera shall have IP filtering, HTTPS, SSL, IEEE 802.1X, and configurable user authority levels for greater security.
20. The IP camera shall have network bandwidth limitation and MAT features for more efficient use of network bandwidth.
21. The IP camera shall have Easy network access via UPnP (Universal Plug and Play) function and embedded mDNS (Multicast DNS) protocol.
22. 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: 1/3” CMOS
2. Maximum Resolution: 1920 x 1080
3. Scanning Mode: Progressive Scan
4. Lens Type: Motorized Vari-focal (f=3.3 - 10mm, F1.3 - 2.5)
5. Iris Control: P-Iris
6. Angular Field of View (H: Horizontal, V: Vertical, D:Diagonal):
   A. Wide: 95.7º(H), 50.6º(V), 114.4º(D)
   B. Tele: 31.8º(H), 17.9º(V), 36.5º(D)
   C. Pan/Tilt Range: Pan: -176° ~ 176°, Tilt: 0° ~ 66°, Rotate: -90° ~ 90°
7. Minimum Illumination:
   A. COLOR : 0.01 lux @ F1.3
   B. B/W: 0.005 lux @F1.3
8. S/N Ratio: more than 45 dB
9. Maximum Frame Rate:
   A. 60fps : 1920 x 1080
   B. 30fps : 1920 x 1080(WDR)
10. Video Resolution:
    A. DirectIP Protocol Mode: 1920 x 1080, 1280 x 720, 704 x 480, 640 x 360, 352 x 240
    B. IDIS protocol mode: 1920 x 1080, 1280 x 720, 704 x 480, 352 x 240
11. Video Compression : H.265, H.264, MJPEG** (** IDIS Protocol only)
12. Video Compression Level: 4 levels: Basic, Standard, High, Very High
13. Multi-Video Streaming:
    A. DirectIP Protocol Mode: Quadruple streams
    B. IDIS Protocol Mode: Quadruple streams
14. Dynamic Range: 120 dB
15. True Day & Night: Yes (ICR)
16. IR Distance (The number of LEDs, IR wavelength): 20m (28ea)
17. Intelligent Video Analytic: Video Motion Detection, Active Tampering Alarm and Trip Zone
18. Analog Video Output: 1 BNC

### 2.3.2 Audio Specification

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

### 2.3.3 Network Specification

1. Port: RJ-45 10/100 Base-T 1 port
2. Network Protocols:
   A. DirectIP Protocol Mode: DirectIP Protocol
   B. IDIS Potocol 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

### 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. Mechanical or electrical switches can be wired to the Alarm-In and GND connectors. The maximum voltage should not exceed 5V.
   C. 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, TLS

## 2.4.0 Environmental Specification

1. Operating Temperature: -10°C ~ +50°C (+14°F ~ +122°F)
2. Operating Humidity: 0% to 90% non-condensing
3. Vandal-proof Enclosure: Yes
4. Outdoor Ready: IP66

## 2.5.0 Electrical Specification

1. Power Source: 12VDC, PoE(IEEE 802.3af class 3)
2. Power Consumption: 7.5W
3. Regulatory Approvals: FCC, CE (50130-4), KC, RoHS

### 2.6.0 Mechanical Specification

1. Dimensions (Ø x H): Ø155mm x 111.5mm (Ø6.11" x 4.39")
2. Unit Weight: 0.9 Kg (1.98 lb)

## Version History

| Version | Writer | Revision Date | Remarks |
|---|---|---|---|
| 1.1 | Brandon Jo | Sep. 26, 2017 | Added trip zone |
| 1.0 | Glen Oh | Sep. 6, 2016 | Initial Release |