

DC-D1123W Architectural and Engineering Specifications

Version 1.0 (Feb. 15, 2016)

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-D1123W is a Network Camera (IP Camera) designed and manufactured by IDIS. This camera provides HD (1280 x 720) resolution at 30ips (images per second) with H.264/MJPEG compression. This camera is equipped with vari-focal lens, True Day/Night, PoE (IEEE 802.3af Class 2), Audio I/O, Alarm I/O, Vandal-proof dome enclosure design and IP66 rated.

2.2.2 General Specification

- 1. The IP camera shall be equipped with 1 Megapixel 1/2.7" CMOS Sensor.
- 2. The IP camera shall be equipped with 3.3mm 10mm vari-focal lens, F1.5 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 (Digital WDR) for improved video quality in high-contrast situations (more than 70dB).
- 5. The IP camera shall utilize 2DNR (Dynamic Noise Reduction) technology to reduce the bitrate and storage requirements by removing noise artifacts.
- 6. The IP camera shall be vandal proof and IP rating 66 complied dome enclosure design.
- 7. The IP camera shall be equipped with 10/100 Base-T, auto-sensing, half/full duplex, RJ-45 Ethernet connection.
- 8. The IP camera 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.
- 9. The IP camera shall have video out feature (NTSC/PAL).
- 10. The IP camera shall have on board microSD/SDHC card backup storage slot as a safeguard against data loss during network interruptions.
- 11. 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.
- 12. The IP camera shall deliver maximum video resolution of 1280 x 720 at rates up to 30ips (images



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per second).

- 13. The IP camera shall provide direct network connection using H.264 and MJPEG** compression. (** IDIS protocol only)
- 14. The IP camera shall support quadruple streams in DirectIP protocol mode.
- 15. The IP camera shall support triple streams in IDIS protocol mode.
- 16. The IP camera shall conform to the ONVIF** Profile S Ver.2.4.0 standard. (** IDIS protocol only)
- 17. 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)
- 18. The IP camera shall have IP filtering, HTTPS, SSL, IEEE 802.1X, and configurable user authority levels for greater security.
- 19. The IP camera shall have network bandwidth limitation and MAT features for more efficient use of network bandwidth.
- 20. The IP camera shall have Easy network access via UPnP (Universal Plug and Play) function and embedded mDNS (Multicast DNS) protocol.
- 21. The IP camera shall have Intelligent Video Analysis (VA): 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 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 triple streams.
 - C. IDIS protocol shall support H.264 and MJPEG compression.



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2.3.0 Technical Specification

2.3.1 Video Specification

1. Image Sensor: 1/2.7" CMOS

2. Maximum Resolution: 1280 x 720

3. Scanning Mode: Progressive Scan

4. Lens Type: Vari-focal (f=3.3 - 10mm, F1.5 - 2.5)

5. Iris Control: DC Auto Iris

6. Angular Field of View (H: Horizontal, V: Vertical, D:Diagonal):

A. Wide: 105.5°(H), 55.4°(V), 125.3°(D)

B. Tele: 35.3°(H), 19.7°(V), 40.4°(D)

C. Pan/Tilt Range: Pan: -167° ~ 167°, Tilt: 0° ~ 70°, Rotate: -176° ~ 176°

7. Minimum Illumination:

A. Color: 0.6 lux @F1.5

B. B/W: 0.006 lux @F1.5

8. S/N Ratio: More than 45dB

9. Maximum Frame Rate: 30ips @1280 x 720

10. Video Resolution:

A. DirectIP Protocol Mode: 1280x720, 704x480, 640x 360, 352x240

B. IDIS protocol mode: 1280x720, 704x480, 352x240

11. Video Compression: 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: Triple streams

14. Dynamic Range: More than 70dB

15. True Day & Night: Yes (ICR)

16. Intelligent Video Analytic: Video Motion Detection, Active Tampering Alarm, Trip Zone

17. Analog Video Output: 1 Terminal Block

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



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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, 802.1x (EAP)
- 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, TripZone
- 3. Event Notification: Remote S/W, Email (with Image)
 - A. Encryption Type: SSL, TLS

2.4.0 Environmental Specification

- 1. Operating Temperature: -10° C $\sim +50^{\circ}$ C $(+14^{\circ}$ F $\sim +122^{\circ}$ 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 2)
- 2. Power Consumption: 4.8W
- 3. Regulatory Approvals: FCC, CE (50130-4), KC, RoHS



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2.6.0 Mechanical Specification

- 1. Dimensions (Ø x H): Ø160mm x 112mm (Ø6.3" x 4.41")
- 2. Unit Weight: 0.87 kg (1.92 lb)



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Version History

Version	Writer	Revision Date	Remarks
1.0	TS Team	Feb. 15, 2016	Initial Release



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