

DC-S3883HRX

Architectural and Engineering Specifications

Version 1.0
(May, 31st, 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

2.1.0 Manufacturer

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2.2.0 General

2.2.1 Product Description

DC-S3883HRX is an Outdoor Network WDR PTZ Camera (IP Camera) with IR LED designed and manufactured by IDIS. This camera provides 4K UHD (3840 x 2160) resolution at 30ips (images per second) with H.265, H.264, MJPEG compression. This camera is equipped with 31x Auto Focus Zoom lens, IR LEDs, PoE (IEEE 802.3bt), Audio I/O, Alarm I/O, microSD/SDHC/SDXC card backup, Vandal-proof dome enclosure with heater and IP66 rated.

2.2.2 General Specification

1. The IP camera shall be equipped with 2 Megapixel 1/1.7" CMOS Sensor.
2. The IP camera shall be equipped with 6.5mm – 202mm auto-focus zoom lens, F1.55 – F4.8
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 (120dB).
5. The IP camera shall support wide pan (360°) and tilt (0° ~ 190°) range as well as zoom up to 30x.
6. The IP camera shall utilize 2DNR or 3DNR (Dynamic Noise Reduction) technology to reduce the bitrate and storage requirements by removing noise artifacts.
7. The IP camera shall be vandal proof, IP rating 66 complied dome enclosure design.
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 802.3bt to supply power to the camera over the network, 24VAC input.
10. The IP camera shall have built-in heater for continued use in subzero temperature conditions and utilize 24VAC input to provide power.
11. The IP camera shall have video out feature (NTSC/PAL) to preview the image only.
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. 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.
14. The IP camera shall deliver maximum video resolution of 3840 x 2160 at rates up to 30ips (images per second).
15. The IP camera shall provide direct network connection using H.265, H.264 and M-JPEG** compression. (** IDIS protocol only)
16. The IP camera shall support quadruple streams in DirectIP protocol mode.
17. The IP camera shall support quadruple streams in IDIS protocol mode.
18. The IP camera shall conform to the ONVIF** Profile S Ver.2.4.0 standard. (** IDIS protocol only)
19. 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)
20. The IP camera shall have IP filtering, HTTPS, SSL, IEEE 802.1X, and configurable user authority levels for greater security.
21. The IP camera shall have network bandwidth limitation and MAT features for more efficient use of network bandwidth.
22. The IP camera shall have Easy network access via UPnP (Universal Plug and Play) function and embedded mDNS (Multicast DNS) protocol.
23. The IP camera shall have Intelligent Video Analysis (VA): Motion Detection, Active Tampering Alarm and Auto Tracking.
24. The IP camera shall have Digital Image Stabilization (DIS) to reduce the effect of camera shake or vibration.

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: 1/1.7" CMOS
2. Maximum Resolution: 3840 x 2160
3. Scanning Mode: Progressive Scan
4. Lens Type: AF(Auto Focus) Zoom Lens (f=6.5mm – 202mm, F1.55 – F4.8)
5. Iris Control: DC Auto Iris
6. Angular Field of View (H: Horizontal, V: Vertical, D:Diagonal):
 - A. Wide: 58.2°(H), 34.4.°(V), 65.2°(D)
 - B. Tele: 1.99°(H), 1.13°(V), 2.3°(D)
 - C. Pan Range, Speed: 360°, 0.02~180°/sec (preset 240°/sec)
 - D. Tilt Range, Speed: 200° (-10° ~ 180°), 0.02~180°/sec (preset 240°/sec)
 - E. Zoom Range: x31
7. Minimum Illumination:
 - A. Color: 0.1 lux @ F1.55
 - B. B/W: 0 lux (IR LED ON)
8. S/N Ratio: more than 45dB
9. Maximum Frame Rate: 30ips @3840 x 2160
10. Video Resolution:
 - A. DirectIP Protocol Mode: 3840 x 2160 (8MP), 1920x1080, 1280x720, 640x360
 - B. IDIS protocol mode: 3840 x 2160 (8MP), 1920x1080, 1280x720, 640x360
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: 120dB (True WDR)
15. True Day & Night: Yes (ICR)
16. IR Distance (number of LEDs): 200m (2ea)
17. Image Stabilizer: Yes (DIS)
18. Intelligent Video Analytic: Video Motion Detection, Active Tampering Alarm
19. Auto Tracking: Yes
20. Analog Video Output: 1 Terminal Block
21. Advanced PTZ options:
 - A. The number of preset: 256

2.3.2 Audio Specification

1. Audio Compression Algorithm: G.726 (16kHz), G.711 u-Law (8kHz), G.711 a-Law
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 10/100/1000 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: Quadruple Streaming

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: 8 / 2
 - A. Alarm Input: 8 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: 2 TTL open collector, 30mA @ 5 VDC
2. Trigger Events: Detection, Face Detection, Alarm in, Tampering
3. Event Notification: Remote S/W, Email (with Image)
 - A. Encryption Type: SSL

2.4.0 Environmental Specification

1. Operating Temperature: -40°C ~ +60°C (-40°F ~ +140°F), starting up at above -20°C (-4°F)
2. Operating Humidity: 0% to 90% non-condensing
3. Vandal-proof Enclosure: Yes
4. Outdoor Ready: IP66, Heater

2.5.0 Electrical Specification

1. Power Source: 24VAC, PoE (IEEE 802.3bt)
2. Power Consumption: 68.6W (Heater on, IR LED ON), 68.6W (24VAC, PoE input)
3. Regulatory Approvals: FCC, CE (50130-4), KC, UL, RoHS

2.6.0 Mechanical Specification

1. Dimensions (Ø x H): Ø 242mm x 401.1mm (Ø9.52" x 15.79")
2. Unit Weight: 7.4 kg (16.31 lb)

Version History

Version	Writer	Revision Date	Remarks
1.0	Suji Park	May, 31, 2018	Initial Release