

DC-F1211

Architectural and Engineering Specifications

Version 1.0
(Feb. 11, 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**

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2.2.0 General**2.2.1 Product Description**

DC-F1211 is a Network Camera (IP Camera) designed and manufactured by IDIS. This camera provides Full HD (1920 x 1080) resolution at 30IPS (images per second) with H.264/MJPEG compression. This camera is equipped with 4.0mm Fixed-focal lens, Electrical Day/Night, PoE(IEEE 802.3af class 1).

2.2.2 General Specification

1. The IP camera shall be equipped with 2 Megapixel 1/2.7" CMOS Sensor.
2. The IP camera shall be equipped with 4.0mm Fixed-focal lens, F2.0.
3. The IP camera shall be a digital day/night camera with an electrical filter for low light performance.
4. The IP camera shall have Wide dynamic range compensation (Digital WDR) for improved video quality in high-contrast situations (more than 70 dB).
5. The IP camera shall utilize 2DNR (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 802.3af. Class 1 to supply power to the camera over the network.
8. The IP camera shall have video out feature (NTSC/PAL).
9. The IP camera shall be equipped with video stream buffer memory (60MB) to counter pre/post event buffering and network delays for improved network recording reliability.
10. The IP camera shall deliver maximum video resolution of 1920 x 1080 at rates up to 30 images per second (IPS).
11. The IP camera shall provide direct network connection using H.264 and MJPEG** compression (** IDIS Protocol only).
12. The IP camera shall support Quadruple Streams in DirectIP protocol mode.
13. The IP camera shall support Triple Streams in IDIS protocol mode

14. The IP camera shall conform to the ONVIF** Profile S Ver 2.4.0 standard (** IDIS Protocol only)
15. 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)
16. The IP camera shall have IP filtering, HTTPS, SSL, IEEE 802.1X, and configurable user authority levels for greater security
17. The IP camera shall have network bandwidth limitation and MAT features for more efficient use of network bandwidth
18. The IP camera shall have Easy network access via UPnP (Universal Plug and Play) function and embedded mDNS (Multicast DNS) protocol
19. 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 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.

2.3.0 Technical Specification

2.3.1 Video Specification

1. Image Sensor: 1/2.7" CMOS
2. Maximum Resolution: 1920 x 1080
3. Scanning Mode: Progressive Scan
4. Lens Type: Fixed-focal (f= 4.0mm, F2.0)
5. IRIS Control: Fixed Iris
6. Angular Field of View (H: Horizontal, V: Vertical, D:Diagonal):
 - A. 86°(H), 47°(V), 101°(D)
 - B. Pan/Tilt Range: Pan: -60° ~ 60°, Tilt: 0° ~ 80°, Rotate: -176° ~ 176°
7. Minimum Illumination:
 - A. COLOR : 0.4 lux @ F2.0
 - B. B/W : 0.2 lux @ F2.0
8. S/N Ratio: more than 45dB
9. Maximum Frame Rate: 30ips @ 1920 x 1080
10. Video Resolution:
 - A. DirectIP protocol mode: 1920x1080, 1280x720, 704x480, 640x360, 352x240
 - B. IDIS protocol mode: 1920x1080, 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: N/A, Electrical
16. Intelligent Video Analytic: Video Motion Detection, Active Tampering Alarm, Trip Zone
17. Analog Video Output: 1 BNC

2.3.2 Audio Specification

1. Audio Compression Algorithm: N/A
2. Audio Input / Output: N/A
3. Two-way Audio Communication: N/A
4. Pre-recorded Voice Alert: N/A

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: N/A
2. Trigger Events: Motion detection, Tampering, TripZone
3. Event Notification: Remote Software, Email (with Image)
4. Encryption type: SSL, TLS

2.4.0 Environmental Specification

1. Operating Temperature: -10°C ~ +50°C (+14°F ~ +122°F) / *Starting up at above 0°C (32°F)
2. Operating Humidity: 0% to 90% non-condensing
3. Vandal-proof Enclosure: N/A
4. Outdoor Ready: N/A

2.5.0 Electrical Specification

1. Power Source: PoE(IEEE 802.3af class 1)
2. Power Consumption: 3.6W
3. Regulatory Approvals: FCC, CE (50130-4), KC

2.6.0 Mechanical Specification

1. Dimensions (Ø x H): 95mm x 56.21mm x 120mm (3.75" x 2.22" x 4.73")
2. Unit Weight: 0.25 kg (0.56 lb)

Version History

| Version | Writer | Revision Date | Remarks |
|----------------|---------------|----------------------|-----------------|
| 1.0 | Roy Lee | Feb. 11, 2016 | Initial Release |