

# DC-B1101 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

1. IDIS Co., Ltd.

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#### 2.2.0 General

#### 2.2.1 Product Description

DC-B1101 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 PoE (IEEE 802.3af Class 2).

#### 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 an optional C/CS mount lens.
- 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 70dB).
- 5. The IP camera shall utilize configurable 2DNR (Dynamic Noise Reduction) technology to reduce the bitrate and storage requirements by removing noise artifacts.
- 6. The IP camera shall be equipped with 10/100 Base-T, auto-sensing, half/full duplex, RJ-45 Ethernet connection.
- 7. 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.
- 8. The IP camera shall have video out feature (NTSC/PAL).
- 9. 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.
- 10. The IP camera shall deliver maximum video resolution of 1280 x 720 at rates up to 30ips (images per second).
- 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.



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- 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 ActiveX 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): 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: Optional (C/CS mount)

5. Iris Control: DC Auto Iris / Manual Iris

6. Minimum Illumination:

A. Color: 0.7 lux @ F1.2

B. B/W: 0.8 lux @ F1.2

7. S/N Ratio: more than 45dB

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

9. Video Resolution:

A. DirectIP Protocol Mode: 1280x720, 704x480, 640x360, 352x240

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

10. Video Compression: H.264, MJPEG\*\* (\*\* IDIS Protocol only)

11. Video Compression Level: 4 levels: Basic, Standard, High, Very High

12. Multi-Video Streaming:

A. DirectIP Protocol Mode: Quadruple streams

B. IDIS Protocol Mode: Triple streams

13. Dynamic Range: more than 70dB

14. True Day & Night: N/A, Electrical

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

16. Analog Video Output: 1 RCA

## 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



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- 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: N/A
- 2. Trigger Events: Motion 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°C (+14°F  $\sim$  +122°F), \*Starting up at above 0°C (32°F)
- 2. Operating Humidity: 0% to 90% non-condensing

#### 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

## 2.6.0 Mechanical Specification

- 1. Dimensions (Ø x H): 75.6mm x 61mm x 129.3mm (2.98" x 2.4" x 5.09")
- 2. Unit Weight: 0.4 kg (0.89 lb)



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# **Version History**

Version	Writer	Revision Date	Remarks
1.0	Daniel Lee	Feb. 11, 2016	Initial Release



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