

ARCHITECTURAL AND ENGINEERING SPECIFICATIONS  
Section 16780 – Video Surveillance Systems

**ZN-MB series (ZN-MB243M)**

**Network, Outdoor, Mini Bullet with IR LED, Mega-Pixel Color Camera, True Day/Night, Surveillance**

**PART 2 – PRODUCTS**

**2.01 MANUFACTURER**

A. CBC Co. Ltd.  
2-15-13, Tsukishima  
Chuo Ku, Tokyo, Japan 104-0052  
Tel: 81(3) 3536-4840  
Fax: 81(3) 3536-4840

B. This product shall be manufactured by a firm whose quality system is in compliance with the ISO 9001, QUALITY SYSTEM.

**2.02 GENERAL REQUIREMENTS**

- A. The camera is designed to provide advanced image support for resolutions up to 1080p
- B. The camera provides dual-codec functionality, for simultaneous transmission of H.264 and Motion JPEG (MJPEG) video( 2<sup>nd</sup> stream only )
- C. The camera is designed to provide H.264 compressed video of up to 1080p resolution at image rates up to 25/30 images per second (ips).
- D. The camera uses a high-quality 1/2.8" Progressive Scan CMOS image sensor.
- E. The camera is designed with an integrated fixed focal lens f 4 mm, F aperture 2.0 and Field of View(Optical )covering 84.4° (Horizontal) Digital zoom(2 – 10X) is available from Client software on Internet Explore
- F. The camera shall provide Color pictures in light as low as 0.63 lux @F2.0 50 IRE
- G. The camera shall provide B&W pictures in light as low as 0 lux @F2.0 IR LED ON
- H. The camera shall be capable of accepting a power source from IEEE 802.3af Power-over-Ethernet (PoE).
- I. The camera shall be capable of transmitting analog PAL/NTSC selectable (1Vp-p) composite video output (BNC) for setup and installation purposes.
- J. IP66 of weather rating is supported.
- K. 18 IR LEDs are equipped as IR illuminator

## 2.03 ADJUSTMENTS AND FEATURES

- A. Progressive Scan CMOS technology for optimal image clarity.
- B. Full HD 1080p (1920 x 1080 pixels) (2.1 Megapixel) maximum resolution.
- C. Provides True Day/Night functionality, allowing automatic switching between Color mode and B&W mode, as well as removal of an IR cut filter for enhanced low light performance.
- D. Camera shall have integrated, programmable motion detection, with up to four (4) user-defined detection zones, and the ability to map each detection zone to be able to trigger a recording event and/or analog alarm output from the camera unit. Each zone can be configured with a 10-level sensitivity setting.
- E. The camera shall support Back Light Compensation (BLC).
- F. Privacy masking function is supported (2 areas ).
- F. Two (2) authority levels of user privileges shall be available:
  - a. Admin level shall have full access to all functions.
  - b. User level will be restricted to monitoring live video only.

## 2.04 VIDEO REQUIREMENTS AND ADJUSTMENTS

### A. Minimum Adjustments and Requirements

- 1. Imager: Progressive Scan 1/2.8" CMOS Sensor.
- 2. Effective Pixels: 1984(H) x 1225(V)
- 3. Resolution:

ZN-B2MTP : 1920 x 1080 (Full HD), 1280 x 1024 (SXGA), 1024 X 768(XGA),  
1280 x 720 (720P), 640 x 480 (VGA), 640 x 360 ( HVGAW ), 320 x 240 (QVGA),  
704 x 480/576 (4CIF), 352 x 240/288 (CIF)
- 4. Shutter: Electronic range (in seconds) of 1/4, 1/10, 1/12.5, 1/15, 1/20, 1/25, 1/30, 1/50, 1/60, 1/100, 1/120, 1/240, 1/480, 1/960, 1/1024, 1/2000.
- 5. Minimum Illumination (color/day mode): 0.63 lux @ F2.0 50 IRE
- 6. Minimum Illumination (B&W/night mode): 0 lux @ F2.0 IR LED ON
- 7. The camera shall provide selectable White Balance settings include Auto-tracing White (ATW), and Manual control with Preset.
- 8. The camera shall support Backlight Compensation (BLC).
- 9. Electronic iris: Selectable On/Off.
- 10. Day/Night: Selectable Auto/Color/Black & White.
- 11. AGC(Auto Gain Control) is supported

## 2.05 OPERATING ENVIRONMENT

- A. PC: IBM PC/AT or compatible.
- B. Operating Systems: Windows XP Professional (32-bit), Windows Vista, Windows 7.
- C. CPU: Pentium (or equivalent) 2.80GHz (or higher).
- D. Memory: 1GB (or higher).
- E. Network Interface: 10/100/1000 Base-Tx (up to 1Gigabit operation) (RJ-45 connector).
- F. Display Card: 1280 x 1024 minimum resolution; DirectX version 8.0 (or higher).
- G. Graphics Chip: NVIDIA GeForce 8500GT 256MB (or higher).
- H. Web Browser: Internet Explorer 7.0 (or higher).

## 2.06 NETWORK INTERFACES

- A. Protocols supported:
  - IPv4/6, HTTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP.
- B. Camera IP interface: RJ-45 10/100 Base-Tx, PoE compatible.
- C. The camera shall interface to:
  - Microsoft Internet Explorer 7.0, or above.
  - Compatible PDA / smart phone
- D. When accessed from a browser online, the camera shall provide a web-based graphical user interface and menu system, for viewing and configuration of the camera.
- E. Web access protected by user ID and password. The camera shall maintain an event log which includes all remote login events.
- F. Up to 4 users may access a camera via the web server simultaneously.
- G. One (1) alarm input (NO/NC) shall be provided.
- H. One (1) alarm output (NO/NC) shall be provided.
- I. One (1) audio input (mono, line-level, unbalanced) shall be provided.
- J. The camera shall support both static IP addresses and dynamically-assigned IP addresses provided by a Dynamic Host Control Protocol (DHCP) server.
- K. Third party application integration of the camera is supported via HTML Application Programming Interface (API), which would provide the necessary information and command lines for accessing the camera using command lines or third-party software application.
- L. This device is certified ONVIF compliant (conformant), allowing it to be accessed using a generic ONVIF device driver.

M. This device has the ability to upload still snapshot JPEG images to an FTP site, based on user-defined events or regularly upon scheduled intervals.

N. This device supports Micro-SDHC cards from most major brands, capacity up to 32GB.

## 2.07 ELECTRICAL

A. Power Consumption:

Power Consumption	ZN-MB243
PoE(Class 2) / IR LED Off	70mA, 3.4W
PoE(Class 2) / IR LED On	100mA, 4.8W

## 2.08 MECHANICAL

A. Weight: 325g (0.72 lbs.)

B. Dimensions: Ø 57.9mm x 85mm (L) / Ø 2.2" x 3.4"(L)

C. Materials : Aluminum Diecasting

## 2.09 ENVIRONMENTAL

A. Operating Temperature: ( not cold start )

-10°C ~ 50°C ( 14°F ~ 122°F ) / RH less than 90% (non-condensing)

B. Weather rating : IP66

## 2.10 ELECTROMAGNETIC COMPATIBILITY

CE, FCC, UL,

## 2.11 ENVIRONMENTAL REGULATION

RoHS, WEEE