ARCHITECTURAL AND ENGINEERING SPECIFICATIONS
Section 16780 – Video Surveillance Systems

ZN-DxxT series (ZN-D1MTP, ZN-D1MTP-IR, ZN-D2MTP, ZN-D2MTP-IR)

Network, Indoor Dome, Mega-Pixel Color Camera, True Day/Night, w/wo LED, 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 (ZN-D2MTP, ZN-D2MTP-IR) and 720p (ZN-D1MTP, ZN-D1MTP-IR).

B. The camera provides dual-codec functionality, for simultaneous transmission of H.264 and Motion JPEG (MJPEG) video.

C. The camera is designed to provide H.264 compressed video of up to 1080p (ZN-D2MTP, ZN-D2MTP-IR) and 720p (ZN-D1MTP, ZN-D1MTP-IR) res. 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 f 3~9mm varifocal lens with P-Iris functionality.

F. The camera shall provide Color pictures in light as low as 0.21 lux @F1.2 50 IRE

G. The camera shall provide B&W pictures in light as low as 0 lux @ LED on.

H. IR LED is equipped. (ZN-D1MTP-IR, ZN-D2MTP-IR)

I. The camera shall be capable of accepting a power source from either 12VDC, 24VAC or IEEE 802.3af Power-over-Ethernet (PoE).

J. The camera shall be capable of transmitting analog PAL or NTSC (1Vp-p) video(BNC) for setup and installation purposes.

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 (ZN-D2MTP ZN-D2MTP-IR).

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 10-level sensitivity setting.

E. The camera shall support Back Light Compensation (BLC).

F. The camera shall provide the ProSet System featuring motorized varifocal lens with P-iris which allows the user to adjust the lens focal length and focus remotely and One-Push AF function from a web-browser or any supported NVR software.

G. 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. Image Size:

H.264 – 16:9 HD:	1920 x 1080(Full HD Model) @ 25/30ips
	1280 x 720 (720P) @ 25/30ips
	640 x 360 (HVGAW) @ 25/30ips
	640 x 352 @ 25/30ips
H.264 – 4:3:	1280 x 1024 (SXGA) @ 25/30ips
	640 x 480 (VGA) @ 25/30ips
	320 x 240 (QVGA) @ 25/30ips
	704 x 480/576(4CIF) @ 25/30ips
	352 x 240/288 (CIF) @ 25/30ips
MJPEG	1280 x 720 (720P) @ 25/30ips *
	640 x 480 (VGA) @ 25/30ips
	320 x 240 (QVGA) @ 25/30ips
	704 x 480/576(4CIF) @ 25/30ips
	352 x 240/288 (CIF) @ 25/30ips
* Available only when 1280x720@1st stream	

4. Iris Control: P- Iris lens is installed. This new technology gives a best resolution at any light condition.

5. Shutter: Electronic range (in seconds) of 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.

6. Minimum Illumination (color/day mode): 0.21 lux @ F1.2 50 IRE

7. Minimum Illumination (B&W/night mode): 0 lux @ (IR LED ON)

8. The camera shall provide selectable White Balance settings include Auto-tracing White (ATW), and Manual control with Preset.

9. The camera shall support Backlight Compensation (BLC).

10. Electronic iris: Selectable On/Off.

11. Day/Night: Selectable Auto/Color/Black & White.

12. AGC Gain: Selectable On/Off. Adjustable gain control in 'Off' mode.

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.

2.07 ELECTRICAL

A. Power Consumption:

Power Consumption	ZN-D2MTP-IR	ZN-D1MTP-IR	ZN-D2MTP	ZN-D1MTP
12VDC	680mA, 8.2W	680mA, 8.2W	500mA, 6.0W	500mA, 6.0W
24VAC	510mA, 7.5W	510mA, 7.5W	420mA, 6.2W	420mA, 6.2W
PoE	150mA, 7.2W	150mA, 7.2W	120mA, 5.8W	120mA, 5.8W

2.08 MECHANICAL

A. Weight: 400 g (0.88 lbs.)

B. Dimensions: 119mm (H) x Ø 124.7mm / 4.5” (H) x Ø 4.9”

2.09 ENVIRONMENTAL

A. Operating Temperature: (not cold start)
-5ºC ~ 45ºC (23ºF ~ 113ºF)

2.10 ELECTROMAGNETIC COMPATIBILITY
CE, FCC, UL,

2.11 REGULATION
RoHS, WEEE