VERINT NEXTIVA V4320BX-DN 1080P DAY/NIGHT WDR IP CAMERA

SECURITY SYSTEM

TECHNICAL SPECIFICATIONS DIVISION – 28 ELECTRONIC SAFETY AND SECURITY LEVEL 1_28 20 00 ELECTRONIC SURVEILLANCE

LEVEL 2_28 23 00 VIDEO SURVEILLANCE

LEVEL 3 28 23 29 VIDEO SURVEIILANCE REMOTE DEVICES AND SENSORS

PART 2 – PRODUCTS

2.01 GENERAL

- A. All equipment and materials used shall be standard components that are regularly manufactured and utilized in the manufacturer's system.
- B. All equipment and components shall have been thoroughly tested and proven in actual use.

2.02 GENERAL SPECIFICATIONS

- A. The IP Camera shall process and compress video images into digital data files utilizing H.264 and MPEG-4 compression technologies. The camera shall integrate with Verint's Nextiva VMS and EdgeVR DVR systems, and shall be available in a variety of popularly used form factors:
 - a. Provide Wide Dynamic Range capability in excess of 95 dB
 - b. Provide H.264 compression
 - C.
 - d. Provide up to 4 separate streams of compressed video
 - e. Be capable of accepting power at 24V AC, 12V DC or Power-over-Ethernet (PoE)
 - f. Support bi-directional audio
 - g. Provide audio integration into the Nextiva VMS
 - h. Support on-board storage SD, MicroSD or SDXC card
 - i. Provide Storage Integration into the Nextiva VMS
 - j. Provide resolution options from 640x480 pixels at 30 fps to 1920x1080 pixels at 30 fps
 - k. Provide full-time analog video out
 - I. Removable IR cut filter for low-light performance and IR illumination support

2.03 OPERATING SYSTEM

A. The IP camera shall utilize an embedded stable OS that resides on on-board non-volatile flash memory. It shall not reside on internal or external Hard Disk Drives. The camera shall not use a standard PC based OS and should not require constant virus or OS patch management for proper security protection.

2.04 VIDEO PROCESSING AND COMPRESSION

- A. The IP Camera shall utilize true multi-shutter wide dynamic range capability to deliver more than 95 dB of dynamic range.
- B. The IP camera shall be able to use H.264 compression for the transmission of video to the camera's storage or to any remote authorized system to which the camera is connected.
- C. The IP camera shall support both 2D and 3D noise reduction, with both types being independently configurable.

- D. Compression quality shall be selectable with a minimum of five levels that can be programmed to maximize operational storage requirements.
- E. The camera shall provide a constant bit rate mode where the bit rate and the quality parameters can be set to perfectly match the storage and network requirements.
- F. The camera shall be able to record on a user-supplied microSD card properly inserted into the camera's card slot and not exceeding 64 GB in total card capacity
- G. The camera shall use a 1/2.8" CMOS imager
- H. The camera shall be able to record to the card at any one of a number of profiles, including timed recording, record upon event or record upon command from an integrated management and recording system
- I. The camera shall be able to record on the card as a constant overwrite or to stop recording when the card is full and notify the administrator that the card is full

2.05 AUTHENTICATION AND PROTECTION

- A. The camera shall use an Unalterable Image Format to maintain the security and integrity of the digital video files.
- B. The camera shall use Secure Socket Layer (SSL) protocol to communicate configuration information to associated NVRs and DVRs.
- C. The camera shall support the 802.1X network tamper trap standard

2.06 CONTROLS

A. Camera shall be remotely controllable and configurable via the web GUI and via Verint's Nextiva VMS and EdgeVR Vid-Center

2.07 POWER/ACTIVITY INDICATORS

A. The camera shall include LED or other indication on the body of the camera that indicates the power and network status of the camera, including error modes.

2.08 VIDEO OUTPUTS

- A. The camera shall include an Ethernet port for the purpose of communicating to and from the camera and for the purpose of receiving one or more digital, compressed video streams.
- B. The camera shall include an analog 1 Volt peak-to-peak, 75 ohm video output.

2.09 ALARM SIGNALING

- A. The camera shall include a dry contact alarm in
- B. The camera shall include dry contact alarm out (Relay output)

- C. The alarm input(s) and output(s) shall be programmable via the camera interface to determine if the input(s) and output(s) normal state is "Normally Open" (NO) or "Normally Closed" (NC).
- D. The camera shall provide a minimum resolution support of 640 x 480 expandable to 1920 x 1080 pixels

2.10 COMMUNICATIONS

- A. Network: The camera shall include one Ethernet 10/100 base T ports for TCP/IP LAN/WAN connectivity.
- B. The camera shall be programmable for static or dynamic (DHCP) IP addressing.
- C. The camera shall support the following protocols: IPv4, IPv6, TCP/IP, UDP/IP HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, , CoS, QoS, SNMP and 802.1X
- D. The camera shall support multiple simultaneous user connections and operation for accessing live and recorded video.

2.11 REMOTE PROGRAMMING FUNCTIONS

- A. All camera functions shall be supported by the client web interface including but not limited to:
 - a. Ability to change the network configuration of the camera, including IP address, gateway and port information, transmission protocols, security protocols and other values pertaining to standard network configuration
 - b. Simple video stream viewing via the web client
 - c. Ability to change compression type between H.264 and MPEG-4
 - d. Ability to adjust compression level
 - e. Ability to adjust frame rate
 - f. Ability to adjust traditional CCTV camera settings including:
 - i. White balance
 - ii. Hue and Saturation
 - iii. Contrast
 - iv. Gain profile and Gain level
 - v. DC auto-iris control
 - vi. Shutter speed
 - vii. Exposure time
 - g. Ability to turn Digital Wide Dynamic Range (WDR) capability on and off
 - h. Network Throttling
 - i. Password Management
 - j. Camera title
 - k. Motion detection control including
 - i. Area of motion detection
 - ii. Motion detection sensitivity
 - iii. Percentage of motion for alarm generation
 - iv. Log of recent motion events

2.12 SYSTEM ENTERPRISE MANAGEMENT SOFTWARE

A. The camera shall be compliant and available for optional system management software support. The system management optional software shall provide for health checks, device status log information, and camera input status, firmware upgrades, password management and other system wide functions.

2.13 MECHANICAL

- A. Dimensions: 4.9L x 3.2W x 2.0H in. (125L x 82W x 52H mm)
- B. Weight: 0.73 lbs (330g)
- C. Mount: The camera shall allow standard mounting using 1/4 x 20 threaded mounts

2.14 ENVIRONMENTAL

- A. Operating Temperature: 32°-104° F (0° to 40 ° C)
- B. Humidity: 0 to 90% non-condensing.

2.15 ELECTRICAL

- A. 12V DC
- B. 24V AC
- C. IEEE 802.3at Class IV Power Over Ethernet or IEEE 802.3af Class III PoE

2.16 REGULATORY AND COMPLIANCE

- A. UL
- B. FCC Part 15 (Subpart B, Class A)
- C. Canada ICES-003/NMB-003 Class A
- D. CE (EN55022, EN55024)
- E. RoHS
- F. CU-TR
- G. CB

2.17 INSTALLATION AND OPERATION INSTRUCTIONS

A. The unit shall ship with an install guide containing all installation instructions.

2.18 WARRANTY

A. The product shall contain up to 3-year warranty from the manufacturer.

2.19 VERINT MODEL NUMBERS

A. V4320BX-DN