# Annex 5: CUBICLE AND TURNSTILE CAMERAS SPECIFICATIONS

### Camera Technical Specifications

**TYPE: 6MP NETWORK INDOOR DOME CAMERA-Cubicle cameras**

| Feature | Minimum Specifications | Bidder Response |
|---|---|---|
| **Brand Model/Technology** | Mature internationally recognized brand, in existence for at least 10 years (bidder must specify brand, model and series) | |
| **Power** | PoweroverEthernetIEEE802.3af/802.3at | |
| **Connectors** | RJ45 10BASE-T/100BASE-TX PoE | |
| **Image Sensor** | 1/2.9" progressive scan CMOS | |
| **Lens** | Varifocal, IR corrected, CS-mount 3–10 mm, F1.3 | |
| **Focusing** | Auto | |
| **Light Sensitivity** | <ul><li>Day Mode (Color image):0.24lux</li><li>B/W: 0.03lux</li><li>With IR Mode: 0.01lux</li></ul> | |
| IR Range | 30 meters | |
| WDR | 120 dB | |
| **Video** | <ul><li>Compression:</li></ul> H.264,H.265MainProfile(MPEG-4Part 10/AVC),MotionJPEG <ul><li>Resolution:</li></ul> 3072 x 1728 (5 MP) to 320X240 Frame rate: 30 fps @ 5 MP <ul><li>VideoStreaming:</li></ul> Multiple, individually configurable streams in H.264andMotionJPEGControllableframe rateandbandwidthVBR/MBRH.264 <ul><li>Image Settings:</li></ul> Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control, Exposure zones, Fine tuning of behavior at lowlight, Text and image overlay, Privacy mask,mirroringofimages,0°,180°rotation, | |
| **Internal recording** | 60 s pre alarm recording | |
| **Memory** | Supports up to 32 GB micro SDHC | |

| Feature | Minimum Specification | Bidder's Response |
|---|---|---|
| **Audio line in** | Must support | |
| **Audio line out** | Must support | |
| **Operating Conditions** | -20 °C to 50 °C with PoE | |
| **Accessories** | Proper mounting kit as will be determined on site | |
| **Intelligent Analytics** | Must support video analytics on the NVR side with the following capabilities; Object counting Target cropping scheme Object entering/leaving Facial recognition License Plate Recognition Smart search with Thumbnails Region entering/leaving Object identification Forensic search | |
| **System Support** | Onvif compliance | |
| **Supported Protocols** | 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ(QoS), LLDP,SOAP,Dropbox™,CHAP, digest authentication | |
| **Casing** | Rating: IK10 impact resistant aluminum enclosure | |
| **Warranty** | 3 Years | |

# 24 PORT NETWORK SWITCH

| | | |
|---|---|---|
| **General Descriptive Requirement:** | Enterprise standalone, High-density, High performance, Gigabit Ethernet switch. Layer 2 switching and basic routing to be supported.<br>The switch MUST provide a seamless integration with the existing KRA network | |
| **Model and Technology:** | Manufacturer/Brand | |
| | Model | |
| | Technical Data Sheet | |
| **Network Ports:** | Twenty four (24) Ports PoE+ Ethernet with 2 SFP and 1 RJ-45 Uplink interfaces. | |
| **PoE+ capable ports:** | All ports, with up to 30W per port | |
| **Features:** | Must support (IPv4 and IPv6) features, advanced quality of service (QoS), rate limiting, Access Control Lists (ACLs) | |
| **Total PoE+ power Budget:** | 120W Minimum for 8 port switch | |
| **Power Source:** | Dual power supply units, 240V, 50Hz | |
| **Network Monitoring:** | Compliant with IEEE SNMP standards. Capable of monitoring the Network up to Node Level. Management by a well-known and developed proprietary OS. | |
| **Spanning Tree Protocol Technology:** | Support for Spanning Tree Protocol Technology | |
| **Security:** | Port Level Security e.g. Port Filtering, Access Control Lists, Policy based routing etc. Management by a recognized proprietary operating system | |
| **Compliance:** | IEEE 802.1D STP, IEEE 802.1p CoS, Prioritization, IEEE 802.1Q VLAN, IEEE 802.1s, IEEE 802.1w, IEEE 802.1X, IEEE 802.1ab LLDP, Bluetooth v4.0, IEEE 802.3ad, IEEE 802.3af and IEEE 802.3at<br>IEEE 802.3ah (100BASE-X, single/multimode fiber only), IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports, IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX | |
| **Authorized distributor:** | Attach Manufacturer's Authorization Form | |
| End of life | The switch must not be a product that has/is reaching end of life support and end of sale in two years' time | |
| **Warranty:** | 3    years | |

1. **Face Recognition Camera**

| **TYPE :** 6 MP Motorized Face Recognition PoE Network Camera with Digital Zoom | | |
|---|---|---|
| **Feature** | **Minimum Specification** | **Bidders Response** |
| **Brand Model/Technology** | Mature internationally recognized brand, in existence for at least 10 years (bidder must specify brand, model and series) | |
| **Power** | Power over Ethernet IEEE802.3at DC12V/AC24C terminal block | |
| **Connectors** | RJ45 10BASE-T/100BASE-TX/1000BASE-T | |
| **Image Sensor** | 1/2.9-in. 6 MP Progressive-scan STARVIS™ CMOS | |
| **Lens** | Vari-focal | |
| **WDR** | 120dB | |
| **Resolution** | 6 MP (3072 x 2048), 3072 x 1728, 2592 x 1944 2688 x 1520, 2560 x 1440, 2304 x 1296, 1080p (1920 x 1080), SXGA (1280 x 1024, 1.3 MP (1280 x 960), 720p (1280 x 720), D1 (704 x 480), CIF (352 x 240) | |
| **Angle of View** | N64CG52 Horizontal: 98° Vertical: 67° N64CG53 Horizontal: 69° | |
| **Day/Night** | Automatically removable infrared-cut filter | |
| **Minimum illumination** | B/W 0 lux / Color 0.1 lux @F1.8 1/15 sec | |
| **Video** | Compression: H.264, (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG Image Settings: Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control, Exposure zones, Fine tuning of behavior at low light, Text and image overlay, Privacy mask, Capture alignment | |
| **Motion Detection** | Must support motion recording | |
| **Vandal resistant** | IK-10 | |
| **Memory** | Must support SD card memory | |
| **Operating Conditions** | -40°C ~ 60°C (-40°F ~ 140°F) | |
| **Application - Accessories** | IP66 Rated Outdoor | |

| Intelligent Analytics | Must support video analytics on the NVR side as follows;<br>Object counting<br>Target cropping scheme<br>Object entering/leaving<br> Facial recognition<br>Smart search with Thumbnails<br>Region entering/leaving<br>Object identification<br>Forensic Search | |
|---|---|---|
| **System Support** | Onvif compliance | |
| **Supported Protocols** | TCP/IP, UDP, ICMP, IPv4, IPv6, SNMP v2c/v3, QoS, HTTP, HTTPS, LDAP (client), SSH, SSL, SMTP, FTP, RTSP, UPnP, DNS, NTP, RTP, RTCP, DynDNS , Zero Configure | |
| **Warranty** | 3 Years | |

2. **Bioreader Specifications**

| TECHNICAL SPECIFICATIONS FOR BIO READER | | |
|---|---|---|
| **Feature** | **Minimum Specification** | **Bidder Response** |
| **Brand Model/Technology** | Mature internationally recognized brand, in existence for at least 10 years (bidder must specify brand,<br>model and series) | |
| Biometric | Face Extractor/Matcher | |
| Live Face Detection | Supported | |
| RF Options | 125 kHz EM. 13.56 MHz MIFARE. MIFARE Plus, DESFire/EV1, FeliCa, and NFC | |
| Template | SUPREMA | |
| Capacity | Maximum Users (One Face Enrollment per User): 30,000 (1:1), 3000 (1:N)<br><br>Maximum Faces per User: 5<br><br>Maximum Templates: 900,000 (1:1), 90,000 (1:N)<br><br>Maximum Text Logs: 5,000,000<br><br>Maximum Image Logs: 50,000 | |
| CPU | 1.4 GHz Quad-Core | |
| Memory | Flash: 8 GB<br>RAM: 1 GB | |
| LCD Screen | 4" / 101.6 mm TFT LCD<br><br>Resolution: 800 x 480 | |

| | | |
|---|---|---|
| Image Sensor | CMOS | |
| Camera Resolution | 720 x 480 | |
| Diagonal Field of View (FOV) | Visual Lens: 92.7° <br> IR Lens: 58° | |
| Sound | 24-Bit Voice DSP (Echo Cancellation) | |
| Built-In Microphone | Yes | |
| Built-In Speaker | Yes | |
| Intercom | Supported | |
| Ethernet | 1 x 1000M, Auto MDI/MDI-X | |
| RS-485 | 1-Channel Host or Slave (Selectable) | |
| Wiegand | 1 x Input <br> 1 x Output | |
| TTL | 2 x Inputs | |
| Relay | 1 x Relay | |
| USB | USB 2.0 (Host) | |
| Power | 24 VDC | |
| Operating Temperature | -4 to 122°F / -20 to 50°C | |
| Operating Humidity | 0 to 80%, Non-Condensing | |
| Tamper Resistance | Yes | |
| Certificates | NDAA, CE, FCC, KC, RoHS, REACH, WEEE | |
| Weight | Device: 19.3 oz / 548 g <br> Bracket: 2.6 oz / 74 g (Including Washer and Bolt) | |
| **Warranty** | 3                                    years | |