

NOTE

The items concerned being technology intensive equipments. It is likely that different OEMs may have products with specifications which are not uniform. In this context it is informed that the specifications mentioned are indicative of core requirements and that during evaluation and selection of the product, weightage will be given to performance and capability of the product under required conditions. However materially substantial variations in specifications are likely to lead to disqualifications.

Tender No. 04/2012

Integrated Cell phone and PDA Data Extractor and Analyser

Forensic PDA Extractor

Includes PDA Imager and PDA Analyzer

PDA Imager

1. Uses MD5 hash for authentication
2. Support physical and logical acquisition
3. Logical acquisition includes files, database and registry
4. Creates a single evidence file with proprietary format
5. Comprehensive HTML reporting

PDA Analyzer

1. Standard Windows Application
2. All feature of Forensic Analysis software
3. Creates Log of each analysis session and analyzing officer's details
4. Supports the analysis of Wince/Pocket PC/Windows mobile and Palm OS PDA images
5. Unicode support
6. Gallery view of images
7. Timeline analysis of files

8. Multiple key work and GREP search
9. File search base on extension
10. Registry viewer
11. Book marking on selected data, files and folders
12. Well defined report generation.

Tender No. 05/2012

WATER BATH

Temperature range: 30 – 100 degrees
Capacity: 6 litre
External dimension: 36 x 28 x 32 cm (Approx)
Internal dimension: 32 x 17 x 18 Cms (Minimum)
Internal material: Stainless Steel
External Material: Stainless Steel Epoxy coated
Lid: Stainless Steel
Thermometer: 20 – 110 degrees
Tube racks for PP tubes
Warranty: 3 Years

Tender No. 06/2012

SHAKING WATER BATH

Temperature range: 20 – 99 degrees
Filling volume: 8 to 20 litres
Shaking frequency: 20 to 200
Shaking Stroke: 15 mm
Bath Size: 50 x 30 cms
Display resolution for temperature: 0.1 degrees
Display resolution for shaking: 1 rpm
Electronic timer
Key pad for adjustment of set point temperature, frequency and time
Audible signal for warning and cut off functions
Removable shaking carriage

Internal material: Stainless Steel

External Material: Stainless Steel Epoxy coated

Lid: Plexi glass/Stainless Steel

Warranty: 3 Years

Tender No. 07/2012

DIGITAL REPROVIT UNIT

1/3" CCD camera on stand

Base lights and cathode lamps

Built in storage of minimum 200 frames in the camera

External storage of 8 GB capacity (minimum)

Facility for three dimensional and two dimensional photography

Warranty: 3 Years

Tender No. 08/2012

UV CHAMBER WITH EYE PROTECTION

UV cabinet of dimension 75(L) x 60 (W) x 25(H) cm

Mild Steel, Powder Coated

View piece: aluminium casting with eye protection

Light source: Short wave: 254 nm

Long wave: 365 nm

Visible light

Individual toggle switch for each light

The cabinet should be openable at three sides

UV protecting goggles

Glass filter to protect the eyes against UV light

Warranty: 3 Years

SECURITY CAMERAS IN JUNCTIONS

TECHNICAL SPECIFICATIONS FOR SURVEILLANCE SECURITY USING SPEED DOME CAMERAS (CCTV SYSTEM)

a. Introduction:

1. Surveillance SECURITY CAMERA CCTV system is required to ensure effective surveillance of an area as well as create a tamperproof record for post event analysis. The System shall provide an online display of video images on TFT monitors/Video Wall/Large plasma monitors located in Central as well as Local control Rooms at suitable/desired locations.
2. System should facilitate viewing of live and recorded images and controlling of all cameras by the authorized users present in the LAN.
3. System should provide inter-operability of hardware, OS, software, networking, printing, database connectivity, reporting, and communication protocols. System expansion should be possible through off-the-shelf available hardware.
4. Equipment with better specifications shall be accepted.
5. Installation commissioning of Security Camera is not just limited to installation and commissioning of security Camera but also includes comprehensive on site support, vendor management, maintenances of each and every equipment, software, allied items deployed under the project till the expiry of the warranty period.

b. General Specifications

1. Proposed Security Camera CCTV system shall be an open standard based integrated system aimed at providing high-speed manual/automatic operation for best performance.
2. System shall use video signals from various types of indoor/outdoor CCD Colour cameras installed at different locations, process them for viewing on workstations/monitors at Central Control Room/local control rooms and simultaneously record all the cameras without compression for clarity. Joystick or Mouse-Keyboard controllers shall be used for Pan, Tilt, Zoom, and other functions of desired cameras.
3. System shall have combination of Digital CCD Colour video Cameras, analog CCD Colour Video Cameras with Fixed or P/T/Z Lens, encoders /decoders, Network Video recorders (NVR/CAMERA SERVER), Network attached storage (NAS) / Raid backup device for recording, Application software, Colour Video Monitors, Keyboards with Joystick controllers / Mouse-Keyboard, software based Video Matrix Switcher, workstation for System Administration / Management / Maintenance etc.
4. The NVR / CAMERA SERVER can be embedded type or server based. However the NVR / CAMERA SERVER software shall run on common off the shelf available servers (Camera server & Database server). Each NVR / Camera Server shall be able to handle 36 or more cameras.
5. Network Video Recorder shall offer both video stream management and video stream storage management. Recording frame rate & resolution in respect of individual channel shall be programmable.
6. System should ensure that once recorded, the video can not be altered; ensuring the audit trail is intact for evidential purposes.
7. System shall provide sufficient storage of all the camera recordings for a period of 30 days or more @ 25 FPS, at 4 CIF or better quality without compression for all cameras (extended

- capacity of cameras i.e. present capacity + 25 %).
8. System shall use analog CCD cameras with external encoder. The video shall be compressed using MPEG-4 or better standard and streamed over the dedicated OFC media.
 9. Encoders shall digitize analog video, compress the digital video using various compression algorithms (MPEG - 4 or better standard), and transmit the compressed digital video over the dedicated OFC transmission media. Encoders shall have less than 200 ms of latency and shall support dual stream - MPEG 4
 10. The recording resolution and frame rate for each camera shall be user programmable.
 11. The Area under surveillance shall be monitored and controlled from Central/Local Control Room(s) through workstations and Joystick controllers.
 12. Surveillance SECURITY CAMERA CCTV System shall operate on 230 V, 50 Hz single -phase power supply. Power for all the equipment will be conditioned using on-line UPS with minimum 30 minutes or more back up. If any equipment operates on any voltage other than the supply voltage and supply frequency, necessary conversion/correction device for supply shall be supplied along with the equipment.
 13. All the control equipments e.g. servers, NVR/CAMERA SERVER, NAS/Raid backup device, decoders etc. shall be provided in standard Racks.
 14. All the indoor cameras & control equipment shall be suitable for operation from 10 C to 40 C and relative humidity up to 80 % non-condensing. Cameras & other equipment, meant for outdoor installations, shall be suitable to work from (-) 10 C to (+) 50 C with 0 to 90% RH up to 90% non-condensing. This temperature range may be achieved with or without heater

c. System requirements:

1. Camera with external encoder shall be used for image capture.
2. All outdoor Cameras shall be Day/Night cameras.
3. Housing of cameras meant for outdoor camera housing shall be of IP 66 or better rating. These must be integrated by the camera manufacturer.
4. System must provide built-in facility of watermarking or Digital certificate to ensure tamperproof recording so that these can be used as evidence at a later date, if so desired. The recording shall support audit trail feature.
5. All camera recordings shall have Camera IO & location/area of recording as well as date/time stamp. Camera IO, Location/Area of recording & date/time shall be programmable by the system administrator with User IO & Password.
6. Facility of camera recording in real time mode (25 FPS)/15/12.5/10 or lower FPS as well as in any desired combination must be available in the system.
7. Facility of Camera recording in CIF, 2CIF, 4 CIF as well as in any combination i.e. any camera can be recorded in any quality - Selective or Group of cameras must be available in the system.
8. System to have facility of additional camera installation beyond the originally planned capacity.
9. While recording, video shall be un-compressed for better clarity streamed over the dedicated OFC to be laid down by the vendor. Once on the network, video can be viewed on a Control room workstation or on analog monitor using a hardware decoder (MPEG-4/compatible standard Receiver) and shall be recorded on NVR/CAMERA SERVER and shall be backed up on NAS/RAID Backup device.
10. System shall be triplex i.e. it should provide facility of Viewing, Recording & Replay simultaneously.
11. The offered system shall have facility to export the desired portion of clipping (from a desired date/time to another desired date/time) on CD or DVD. Viewing of this recording shall be possible on standard PC using standard software like windows media player etc.

12. PTZ Cameras shall have 64 or more pre-defined positions, to be selected through suitable input alarm.
13. Redundancy/Fail-over feature is required i.e. in case of failure of an NVR/CAMERA SERVER the relevant cameras shall automatically switch over to the redundant NVR/CAMERA SERVER.
14. System shall have provision of WAN connectivity for remote monitoring.

d. System design

1. Each camera should be connected to a Video to OFC data converter, through cable, which shall support minimum dual streams.
2. Central/Local Control Room will have workstations along with controllers for Camera operation. For monitoring purposes, Video monitors/Plasma monitors/Video wall shall be setup with suitable mounting arrangements, as per user requirements. Facility for viewing and controlling all the cameras at various other locations, as required, shall be provided.
3. Monitoring at Local control rooms may be restricted to operation of certain cameras only & system administrator should be able to configure the system, accordingly. More than one Local Control rooms may be required in the proposed system with individual configuration.
4. Each control room may have one or more Operators simultaneously using the installed Video monitors/Video wall. Operator control on cameras shall be on a static basis or rotary basis depending on the policies to be decided at site.
5. There shall be a Control System with Video Control Software to manage all the video surveillance devices.
6. Database Server shall keep track of all configurations & events. This will help in proper System administration & management of redundancies etc.
7. Video stream from individual cameras shall be recorded on respective NVR/Camera Server &, subsequently, archived to NAS box/RAID backup device. System shall have provision to automatically over-write the new information after the period of 30/31 days & necessary script/algorithm must be available in the Application.
8. All the workstations in LAN should be provided with software to view and control the cameras, encoders and retrieve the recorded video images from the NVR/CAMERA SERVER/NAS/Raid backup device seamlessly.

e. Video Surveillance Application Software

1. The software shall operate on open architecture for integration with perimeter safety, access control, PA and fire / safety systems based on open standards.
2. Digital video surveillance control software should be capable to display and manage the entire surveillance system. It should be capable of supporting variety of devices such as cameras, video encoders, video decoders, PTZ controller, NVR, NAS boxes/Raid backup device etc.
3. The software should have inbuilt facility to store configuration of encoders / decoders and cameras.
4. The software should Support flexible 1/2/4 Windows Split screen display mode or scroll mode on the PC monitor or on preview monitor as per site requirement.
5. The software should be able to control all cameras i.e. PTZ control, Iris control, auto / manual focus, and color balance of camera, Selection of presets, Video tour selection etc.
6. There must be a single encoder for each camera
7. The software is required to generate reports of stored device configuration. The control software is required to provide alarm and alarm log. The log shall be able to be achieved, printed and displayed using a device filter, a device group filter and/or a time window.
8. The software should have user access authority configurable on per device or per device group basis. The user shall have the facility to request the access of any camera and can control the camera for a reservation period. Control of camera is released after the

- reservation period.
9. The system shall provide User activity log (audit trail) with user ID, time stamp, and action performed, etc.
 10. The administrator should be able to add, edit & delete users with rights. It shall be possible to view ability / rights of each user or the cameras which can be viewed & controlled as per the permission assigned by the administrator.
 11. The users should be on a hierarchical basis as assigned by the administrator. The higher priority person can take control of cameras, which are already being controlled by a lower priority user. There should be minimum 3 hierarchical levels of security for providing user level log in.
 12. It should have recording modes viz. continuous, manual, or programmed modes on date, time and camera-wise. All modes should be disabled and enabled using scheduled configuration. It should also be possible to search and replay the recorded images on date, time and camera-wise. It should provide onscreen controls for remote operation of PTZ cameras. It should have the facility for scheduled recording. Different recording speeds (fps) and resolution for each recording mode for each camera should be possible.
 13. It should provide programmable motion detection and recording, to be defined area wise. System must be able to support video motion detection algorithms to detect and track objects, learn the scene, Adapt to a changing outdoor environment, Ignore environmental changes including rain, hail, wind, swaying trees and gradual light changes.
 14. The settings shall be individually configurable for each alarm and each camera prerecord duration. This shall allow the Camera Server to capture video prior to the alarm/event, as well as after the alarm/event. Shall be selectable from a list of values ranging between 0 seconds and 5 minutes.
 15. The software for clients should also be working on a browser based system for remote users. This will allow any authorized user to display the video of any desired camera on the monitor with full PTZ and associated controls.
 16. Retrieval: The cctv application should allow retrieval of data instantaneously or any date / time interval chosen through search functionality of the application software. In case data is older than 30 days and available, the retrieval should be possible. The system should also allow for backup of specific data on any drives like CD/DVD/Blu ray Recorders or any other device in a format which can be replayed through a standard PC based software. Log of any such activity should be maintained by the system which can be audited at a later date.
 17. Backup: Online backup should be maintained to protect against storage failure.
 18. Storage: Data storage should be at a central location in the airport. The capacity of the storage should be equal to 30 days of recording of all cameras at 25 fps/4 OF. The system should follow AFO on recording.
 19. Artificial Intelligence: It shall have image tracking facility. If any object is found to be stationary for a pre-defined period the system shall track the event and alert the operator. This facility shall be provided on select cameras at entry point, check-in counters, X-Ray BIS points, SHA and as defined by the tenderer. The system must have the features for identifying tail-gating, vehicle detection features, unattended baggage identification, queuing analysis, external text insertion feature and intruder detection.

Tender No. 10/2012

GLOVES

Description: White hand gloves with ½" Glass Bead reflective fluorescent tape.

Background Fabric: 100 % Polyester, 135 GSM made from bright glossy yarn, Adhering to International Standard as per BSEN 471 Tests clause 6.1 & 6.2. It has Excellent Colour Fastness and is UV treated, Providing 360⁰ visibility.

Colors Available: Fluorescent Red-Orange, Lime Green

Reflective Tapes: BSEN 471: 2003 approved & Certified by the U.K. Laboratory MTL Glass bead type reflective tape coded as KE-50, having ½" wide. Colour of the reflective tape should be silver grey or glossy white in the nighttime when light will fall on it.

Velcro: Velcro is 25mm wide and 25 mm in length positioned vertically for perfect fastening. The Colour of the Velcro will be **Black**.

The reflective material shall have following features:-

1. Visibility : Reflective material shall be visible from 30 mtrs.
2. Reflectivity : The reflective materials shall have maximum reflective of 500cd/lux (Refer Test Certificate)
3. Certification/Approval : The reflective tape shall be EN 471 Standards (Refer Test Certificate)
4. Washability : The reflective tape shall be approved tested for sustaining 50 washes (Refer Test Certificate)

Tender No. 11/2012

X-RAY BAGGAGE SCANNER

1. Resolution : 40 SWG or better
2. Penetration : 30 mm steel or better
3. Tunnel size : Minimum 500mm X 300mm
4. Display: Flicker free display without corner cut off
5. Multi Energy Imaging
6. Ability to distinguish between organic & inorganic materials
7. Variable edge enhancement
8. Variable colour stripping
9. Variable density zoom
10. Zoom facility
11. View previous bag
12. Date and time display
13. UPS with 1 hour backup
14. Monitor: – Colour monitor minimum 19"
15. Image storage facility (Capacity: 320 GB or higher)
16. Search indicator
17. Inbuilt software for Training programme
18. The system should comply with international health and safety regulations. No leakage of radiation hazardous to the handlers. Certificate from the competent authority should be produced in this regard. Certification for radiation safety in accordance with international standard.
19. Operation manual
20. Three years warranty (onsite replacement warranty)
21. Availability of local service centre is desirable.
22. Detailed Training free of cost to sufficient personnel at the place(s) specified by the Department.
23. The supplier should have well equipped maintenance office with qualified engineers for repairs/service. Supplier should have direct authorization from the OEM to participate in the tender. Necessary authorization documents should be made available in this regard. The name of the OEM along with the contact telephone numbers, addresses, fax numbers & email address may be made available for reconfirmations with the OEM about the status of the supplier.