

This bid is for a DVR system for installation at The Bureau of Clinical Laboratories, 8140 AUM Drive, Montgomery, AL 36117.

The final price is to include complete installation, setup, and testing of system. DVR system must be compatible with three (3) existing cameras and allow for at least five (5) view clients. Vendor must make an on-site visit to view existing cameras and DVR system prior to submitting a bid. Contact Larry Mace at 334-213-2836 to make an appointment.

GENERAL

- A. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in actual use.
- C. All systems and components shall be provided with the availability of a toll free (U.S. and Canada), 24-hour technical assistance program (TAP) from the manufacturer. The TAP shall allow for immediate technical assistance for either the dealer/installer or the end user at no charge for as long as the product is installed.
- D. All systems and components shall be provided with a one-day turn around repair express and 24-hour parts replacement. The repair and parts express shall be guaranteed by the manufacturer on warranty and non-warranty items.

DIGITAL VIDEO RECORDER

- A. The digital video recorder (DVR) shall provide a high-quality recorder capable of storage and playback of images from 16 camera inputs. The DVR shall also provide a simultaneous refreshing recording rate up to 480 images per second (NTSC) at CIF resolution with a DVD-RW as standard equipment. The 16-channel base unit shall be expandable to add an additional 16 camera inputs to provide an optional 32 channel DVR. The DVR shall be capable of storage and playback of audio from 2 built-in audio inputs. The unit shall be expandable to provide 1 audio input for each video channel for the base 16-channel units and the optional 32-channel units. (Optional audio cards disable the 2 built-in audio inputs.) The DVR shall have the ability to provide bidirectional audio to one remote client at a time so that the server may listen to audio as it is being recorded at a remote station.
- B. The server unit shall provide connection to a primary and secondary monitor, and include dual display for as many as 72 local or remote cameras simultaneously. The secondary dual display output shall be switch-selectable to connect to a VGA (DB15) or analog (BNC) monitor. The unit shall also provide one composite monitor output for multiplexed output for as many as 16 local cameras in a single, 2 x 2, 3 x 3, or 4 x 4 view. Camera views shall be configurable in multiple sequences with independently set dwell times and shall have the ability to interleave alarm or motion events into the video sequences.
- C. The unit shall be able to support as many as 16 ATM/POS devices, synchronously record transaction data received from each ATM/POS device into a text database, and record the associated video of that transaction into the DVR's database. The user shall be able to search transaction video associated with transaction data by ATM/POS device name, data, transaction type, specific text within a transaction, or transaction exception.
- D. The DVR server shall include a health check system that monitors certain server CPU components, as well as the operating temperature of each internal hard drive. Health check administration shall allow the modification of some components' operational limits. If a component functions outside of the operating limit, the server shall display an alert on the server main monitor and connected remote client monitors. The details for the error message

and the error log shall specify whether the condition relates to a CPU or hard disk drive condition.

- E. The unit shall provide triplex operation for simultaneous recording while viewing live and recorded video on the same screen.
- F. The DVR shall possess a watchdog system that monitors the system and automatically reboots the system should it lock-up or fail to operate.
- G. The DVR shall utilize a Windows® XP Embedded operating system. The unit shall provide watermarking of each video frame, provide 8, 16, 24, and 32 inputs for external alarms, video motion detection, and scheduled event recording. Remote software shall be provided at no additional cost, for operation using PC, Web, and Pocket PC handheld devices. An Emergency agent application shall be included to provide alarm notification at any connected PC and shall not require the installation of the DVR's PC client software.
- H. The DVR shall meet or exceed the following design and performance specifications.

ELECTRICAL/VIDEO SPECIFICATIONS

- | | | |
|-----------------------------|---|------------|
| A. Input Voltage | 100 to 240 VAC ±10%, 50/60Hz, autoranging | |
| B. Power Consumption | Maximum 350 W | |
| C. Signal System | NTSC/PAL | |
| D. Operating System | Windows XP Embedded only | |
| E. Recording Resolutions | <u>NTSC</u> | <u>PAL</u> |
| | 320 x 240 | 320 x 288 |
| | 640 x 240 | 640 x 288 |
| | 640 x 480 | 640 x 576 |
| | 352 x 240 | 352 x 288 |
| | 704 x 240 | 704 x 288 |
| | 704 x 480 | 704 x 576 |
| F. Recording Modes | Continuous, motion detection, alarm activation, or scheduled recording, and ATM/POS | |
| G. Internal Storage | Hard drive with 250, 500, 750, 1000, 1500, 2000, 2250, or 3000 GB of storage | |
| H. External Storage | RAID 5 storage of 2.25, 4.5, 6.75, or 9 TB | |
| I. Compression | Pelco engineered | |
| J. Frame Rate | <u>NTSC</u> | <u>PAL</u> |
| 1. CIF | 480 ips | 400 ips |
| 2. 2CIF | 240 ips | 200 ips |
| 3. 4CIF | 120 ips | 100 ips |
| K. Video Inputs | 8/16/24/32 (looping with automatic termination) | |
| L. VGA Outputs | | |
| 1. Built-in | 1 VGA (DB15) | |
| 2. Dual Display Card | Switch-selectable VGA (DB15) or analog (BNC) output | |
| M. Hardware Watchdog System | A hardware device to monitor the system clock for Windows lockup; upon lockup of the system the recorder shall automatically reboot without losing any of the programmed settings | |
| N. Password Protection | 4 user levels of protection for setup functions, operation, and system exiting; each level shall have user-assignable features per user level and offer multiple users per level | |
| O. Motion Detection | Built-in motion detection for each camera to start recording or to increase the recording rate of the system | |

P. Motion Areas	Selectable detection area and sensitivity for each camera; motion test pattern for sensitivity
Q. Languages	English, Spanish, German, French, Italian, Portuguese, Russian, and Polish
R. Alarm/Motion Activation	Alarm input will start the unit recording or if already recording, can increase the recording rate and image quality
S. Pre-Alarm/Motion Recording	Records images for up to 60 seconds before the alarm sensor is activated or up to 15 minutes with optional 512 MB RAM upgrade; (pre-alarm time estimate is based on 16-channel recording at a resolution of 320 x 240 CIF and a frame rate of 5 ips)
T. Bandwidth Throttling	Network throttling of transmitted video from 64 KB to 10 MB
U. Alarm History Log	Available through a query
V. Alarm Input Terminals	8/16/24/32 (user-selectable, N.O./N.C.)
W. Analog Video Outputs	1 (2 with 16-channel expansion kit)
X. Relay Output Terminals	8/16/24 (user-selectable, N.O./N.C.)
Y. Relay Contact Ratings	
Rated (Resistive) Load	0.5 A at 120 VAC or 1 A at 24 VDC
Z. Motion Activation	When a unit is in scheduled time recording and a camera detects motion or an alarm is activated, the system shall begin recording the event or increase recording speed to the configured motion or alarm frame rate
AA. Remote Control	Full remote control operation of pan, tilt, and zoom (PTZ) functions through TCP/IP network with PC or Web client
AB. LAN/WAN Connection	Software and hardware is provided for viewing and controlling DVR over the network, including an exclusive server-to-server connection feature
AC. Video Quality	High-quality video recording of at least VHS grade compared to the original video; supports NTSC or PAL video
AD. Color Palettes	Minimum of 16 million color palettes
AE. Gray Scale	256 shades
AF. Backup	A scheduled backup management system is provided to back up data to external devices that are mapped to the server (CD, NAS or other storage devices) without interrupting hard disk recording
AG. Hard Disk Drives	250 GB to 3 TB on board storage capability
AH. Programming	On-screen programming and operation through a keyboard or mouse
AI. Digital Zoom	Digital zoom of the image on the screen during playback modes
AJ. Authentication	Software is provided for image verification of each image recorded
AK. On-line Help system	Provides a built-in help system containing the information manuals needed for faster reference by the user, at both the server and remote client
AL. View Favorites	Provides a mechanism to bookmark and name certain screen configurations and retrieve these by name
AM. KBD300A Keyboard Support	Enables control of as many as 80 cameras connected to 5 servers from a single server-attached keyboard
AN. Digital Zoom Indicator	Zoom functions in playback mode and provides a zoomed indicator up to 6X, and then returns to original resolution
AO. Instant Playback Feature	Provides the option of a forced write to internal disk storage and allows users immediate playback of events

AP. Video Loss Detection	Video loss events are linked to alarms that can trigger a relay and send an email notification, and events can be triggered by two distinct modes: loss of synchronization and low level of video
AQ. ATM/POS Single-Mode	Data interface support for up to 4 ATM/POS devices per server
AR. ATM/POS Multimode Support	Data interface support for up to 16 ATM/POS devices per server
AS. Audio Listen-in	Allows client to listen to live or recorded events on one system at a time
AT. Software Upgrades	Upgrades are provided during warranty period at no charge
AU. System Health Check	Monitors and provides an error message if CPU components or hard disk drive operating parameters exceed their configured thresholds
AV. API Integration	Published APIs are available for application integration to DVR

MECHANICAL SPECIFICATIONS

A. Connectors	
1. BNC	Video inputs and outputs
2. 6-pin mini-DIN	PS/2 mouse and keyboard
3. DB9	COM 1
4. DB15	VGA Port
5. RJ-45	10/100/1000 Megabit Ethernet port and RS-485/RS-422 ports on PTZ control (4)
6. USB	6 high-speed USB 2.0 ports (2 front, 4 back)
B. Audio Connectors	2, 2-channel (right/left) miniature phone jacks for line in and microphone in; 1 miniature phone jack for audio output
C. Optional Audio Connectors	
1. Audio Decoding	GSM610 Wave Format
2. Audio Bit Rate	8 Kbps
3. Audio Levels	
a. Input	Line-level input
b. Output	Line-level output
4. Audio Connectors	Female RCA
a. Standard Inputs	2
b. Option Inputs	8 for the 8-channel unit; 16 for the 16-channel unit (optional Audio cards disable the standard audio inputs)
c. Audio Outputs	1

PHYSICAL SPECIFICATIONS

A. Operating Temperature	50° to 95°F
B. Relative Humidity	Maximum 80%, noncondensing
C. Optical Drive	DVD-RW
D. Antivirus Software	AVG Anti-Virus Free Edition Version 7.5 Symantec AntiVirus™ Corporate Edition Version 10.1.6 McAfee® VirusScan® Plus with SiteAdvisor™

REMOTE CLIENT REQUIREMENTS

Recommended PC Requirements

A. Processor	Intel®, Pentium 4®, with 2800 MHz minimum processor speed
B. Memory	256 MB RAM

- C. Video AGP or PCI-e VGA card with minimum 64 MB video RAM (nonshared memory), 1024 x 768 or 1280 x 1024 display resolution, and DirectX® 8.1 application programming interface
- D. Monitor SVGA or XGA with 1024 x 768 or 1280 x 1024 resolution
- E. Operating system Windows 2000 with Service Pack 4 or Windows XP Professional DirectX 8.1 or later
Microsoft® Internet Explorer® 5.5 or later
500 MB free disk space
- F. Mobile PDA Client Application A Pocket PC with Microsoft PPC 2002 or later, Intel XScale® CPU with minimum 64 MB of memory

CERTIFICATIONS

- A. CE and FCC, Class A
- B. CE and FCC, Class B
- C. UL/cUL

PROJECT SPECIFIC REQUIREMENTS

DVR must be 16-channels with minimum 3TB internal storage capacity. Selected DVR must also have the capability to record each camera at 10IPS on 4CIF resolution.

WARRANTY

3 year parts and labor