



1. DC3 Bid Specifications

Red Signifies Important Items in the Bid Process

The system must use Texas Instruments Chip sets, so longevity, compatibility and reliability are constant. The Use of these Highest Quality chip ensures Cross compatibility for decades to come.

- a. The Digital In-Car Video System shall consist of a mounted digital video recorder, mounted miniature color camera with zoom capability, color touch screen monitor, a bi-directional multi spectrum wireless microphone system, with the receiver in the vehicle and a transmitter for the officer. It shall be capable of providing a clear audio and video recording of traffic stops, pursuits, sobriety tests, etc.
- b. The system shall only record in MPEG2, so that when evidence is needed for court, no transcoding is needed to convert its format to the dvd format. Systems that require transcoding of MPEG4 or h264 are not acceptable.
- c. The DVR, Touch screen, and Wireless microphone receiver must be in one housing, no more than a dimension of 3.4" x 5.3" x 2.5" inches or 88m x 135m x 63m Millimeters.
- d. The overhead console mounted digital video recorder, DVR, shall have no moving parts and shall use Secure Digital (SDHC) media, that can withstand up to 50 g's while recording, for maximum reliability. All operator controls shall be included on the touch screen. The DVR shall be capable of operating within the range of interior temperatures: -40 Fahrenheit to +180 Fahrenheit without the need for supplemental heating or cooling. The DVR must be MIL810F approved and tested for Durability.
- e. The Window mounted camera shall have a 1/4" DSP image sensor with a resolution of 768 X 493, automatic digital image stabilization, auto-focus, automatic gain control and a minimum scene illumination of 0.02 lux. The camera shall be compact as to avoid obstructing the users view.
- f. A compact color 5 inch touch screen monitor shall be provided with a minimum screen size of 5 inches. The monitor utilizes touch screen controls for all features of the video system. The monitor will include a button control to adjust the brightness of the touch screen, as well as an On and Off switch.
- g. The officer worn wireless microphone must be capable of being turned on automatically when the DVR is triggered into the RECORD mode. The automatic wireless microphone system shall use a rechargeable battery and shall be capable of being recharged within the vehicle or with a separate charger located at in the police office.
- h. The DVR shall have integrated into it, the ability to scan driver licenses and barcodes.

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- i. The video system must be able to accept a bio FINGERPRINT READER SCANNER
- j. The DVR shall include an easily accessible port to accommodate the programming of unique user information through the use of a USB key without using the key to open the DVR door.
- k. The Digital In-Car Video System shall include all software, programming, cables and hardware required for installation and use.

2. Digital Video Recorder – DVR

- a. The in-car video system shall be a self-contained, solid-state digital video recorder that utilizes both the stable LINUX operating system and the MPEG2 recording standard for universal compatibility.
- b. Video shall record directly to SDHC solid state memory. Moving hard drives or Compact Flash card file storage is not acceptable.
- c. The systems recording capacity shall be expandable up to 4179 hours.
- d. The recorder shall have a selectable pre-record feature of no less than 120 seconds.
- e. The system shall be capable of an automatic wireless file download to a department server with 802.11n interface.
- f. The system shall be capable of 720 X 480 D1 record resolutions; 16Bit, 48Khz Dual audio channel record capability w/integral speaker and volume control.
- g. The recorder shall have a picture-in picture second rear seat camera.
- h. The DVR shall be capable of recording the department's choice of the following as on screen display:

Wireless Downloading icon
Speed
Position – Longitude and Latitude
Speed
Officer Name
Vehicle Number
Date
Lights
Brake
Crash Sensor
Record Trigger Source
Auxiliary Interface (Radar)
Event Tagging

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Marking Spots on Recording

- i. The DVR shall be able to engage recording automatically if the department has set a speed limit trigger on the DVR without any interaction from the officer.
- j. The recorder shall have a manual event-tagging feature: List selectable and firmware programmable. Such as DUI, Wanted suspect and so on. This event tagging must be customizable to each departments requirements.
- k. The interactive radar management shall include adjustable speed event triggering and display record overlay: Target, Patrol, Maximum Achieved Vehicle Speed and Target Lock.
- l. The DVR shall have a "Marking Feature" on the touch screen. Mark as many points on the recording as you wish. Upon playback jump to the exact point in the video by using this feature.
- m. The recorder shall be capable of being connected to a Driver License reader that can read magnetic strip and bar code. It shall overlay on the video and display/recording magnetic bar code/2D ID data: Last, First, MI, Address, DOB, HT, WT, Hair, Eye, Gender and Expiration.
- n. The DVR shall have Over-Record Protection. Recorded videos can be viewed but not edited.
- o. The DVR shall be firmware upgradeable in the field, without having to send the unit back to the manufacturer.
- p. The DVR shall be constructed with an all Aluminum chassis. A plastic chassis is unacceptable.
- q. The DVR shall have a lockable secure media compartment.
- r. The DVR shall have an input cable for displaying radar information, target, speed, direction. The DVR can be set to have a speed ceiling that if the radar sees a target speeding the DVR automatically goes into record.

3. Compact Low Light CCD Color Camera

- a. The camera housing shall be made solely of Aluminum. The Dimension shall be no larger than 1.9"H x 1.6"W x 3.2"L or in Millimeters 49H x 40W x 81L.
- b. The camera shall have a ¼" Super-HAD DSP Image sensor with a resolution of 768 x 493.
- c. The camera shall have Metal back lit buttons for durability.
- d. The camera shall have automatic digital image stabilization, auto-focus and an automatic gain control.

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- e. The minimum scene illumination of the camera shall be 0.02 lux.
- f. The camera shall have an automatic license plate zoom feature of at least 3 seconds.

4. Compact Touch Screen Monitor

- a. The recorder shall have a 5.0 inch resistive touch screen control monitor.
- b. The compact LCD touch screen monitor shall provide all control for the video system as well as the brightness of the monitor.
- c. For covert operation, it shall be possible to operate the DVR with the touch screen monitor turned off.

5. 2.4Ghz Wireless Microphone

- a. The 2.4Ghz Wireless Microphone shall utilize bi-directional digital spread spectrum communications between itself and its associated transceiver, hereafter referred to as base unit, in order to send clear audio from the user back to the DVR, while providing a bi-directional data and control path from the DVR to the wireless microphone.
- b. The 2.4Ghz Wireless Microphone shall be frequency hopping, to prevent eavesdroppers or overlapping of officers recordings.
- c. Any 2.4Ghz Wireless Microphone shall operate exclusively with any vehicle it is synchronized with.
- d. The 2.4Ghz Wireless Microphone shall allow the operator to remotely activate the DVR's RECORD mode.
- e. The DVR shall automatically activate the wireless microphone when the DVR is activated via the touch screen.
- f. The Wireless microphone will synchronize with its base wirelessly.
- g. 2.4ghz Receiver system using cradles to charge and sync are not acceptable. The system must be cradle free.

6. Automatic Wireless Downloading server software

- A. The server software shall run on any windows operating system from 7 to windows 8 Including Server versions.
- B. The server software shall not need licenses or fees annually.
- C. The software shall be able to download from multiple camera systems simultaneously.



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