

## ADVERTISEMENT FOR BIDS

### REQUEST FOR BIDS – Cardiac Monitor

- I. INVITATION TO BID Sealed bids will be accepted for the purchase a new Cardiac Monitor. Said bids will be received until 10:00 a.m., Wednesday, September 4th, 2020, to be publicly opened and read aloud at that time. Sealed bids will be accepted in the office of the City Administrator of the City of Glendale at: City of Glendale 424 North Sappington Road Glendale, MO 63122
- II. INSTRUCTIONS TO BIDDERS
  - a. Bids that are submitted shall include needed lead time with estimated delivery dates as well as training dates available to us after delivery. Bids must be returned in a sealed envelope clearly marked “Cardiac Monitor”.
  - b. Bidders shall not be permitted to use to their advantage any errors or omissions in the specifications or contract documents. The City reserves the right to issue new instructions or corrections as needed.
  - c. If the bidder has any questions concerning the meaning or intent of the specifications, he or she shall request that an interpretation be made and an addendum issued by the City, which shall be made available to all bidders. Failure to have requested an addendum shall not relieve the bidder from delivery in accordance with the intent of the specifications.
  - d. The City reserves the right to reject any and all bids or to waive any informalities or technicalities in the bid process and to accept the bid, which in the judgment of the City will be in the best interest of or be most advantageous to the City of Glendale.
  - e. No bid may be withdrawn for a period of 30 days following the date specified for opening of the bids.
- III. INTENT OF SPECIFICATIONS It is the intent of these specifications to acquire a new Cardiac Monitor with Manual and AED functions
- IV. GENERAL CONDITIONS
  - a. The items bid on these specifications shall comply in all respects unless deviations are clearly specified. Should it be determined on delivery that the items bid are deficient in any respect, the bidder and manufacturer will, at no expense to the City, correct the deficiencies.
  - b. All guarantees or warranties on all items bid must be attached and included in your bid proposal.
  - c. By soliciting and awarding a bid for a cardiac monitor, the City makes no guarantee it will purchase a Cardiac Monitor.
- V. SPECIFICATIONS See below specifications for The Cardiac Monitor

# **Cardiac Monitor**

## **Minimum System Requirements**

Below you will find the minimum system requirements and scope of work for the proposed cardiac monitoring system. Optional or preferred requirements items are specifically noted. Otherwise, please consider all items the minimum specification requested for a successful bid.

### **Environmental**

- The device must have a handle and weigh less than 11.5 pounds fully configured with one battery and one roll of paper.
- The device must be no greater in dimension than 11.0" wide x 9.0" high x 4.0" deep
- The device must have an IP rating greater than IP65
- The storage temperature of the device must be between -30°F and 160°F
- The device must be tested by at least 25 drops from 45" and pass MIL-STD 810G

### **Color Display**

- The device must have a color touch screen measuring at least 6.0" that can be operated with gloves.
- The layout of the waves and informatics on the screen shall be configurable with no more than 3 button pushes by the user
- The device must visually indicate alarm violations from a 360° view without sound
- The device must have an on-screen user tutorial, built-in training module, or built-in demonstration mode without ancillary modules or equipment.
- The device must be able to assist BLS, or infrequent users in the case of emergency, how to obtain patient measurements like non-invasive blood pressure, end-tidal partial pressure or pulse oximetry readings on-screen without added modules or equipment.

### **Lithium Ion Battery**

- The battery for the device must charge to 90% full capacity in no less than 3 hours from empty
- The battery for the device shall not require annual calibration, maintenance, alignment or other service
- **Optional** – The battery for the device must have a power save mode that allows the device to lengthen its operating time

### **Printer/Recorder**

- The printer/recorder for the device must use paper that is at least 90mm
- The printer/recorder for the device must begin printing in less than 5 seconds

**Communications** – *added preferential consideration given to devices that meet the following specification without additional modules, dongles, equipment or configuration*

- RJ45 Ethernet Port
- At least two USB ports
- Bluetooth connectivity with demonstrated protection against BLE vulnerabilities
- WiFi – 802.11b/g 128-bit encryption, WPA2 and WEP standards
- Cellular
- Optional – Satellite
- Optional – GPS

### **Patient Monitoring**

- The device must be validated for use on neonatal patients
- The device must be capable of switching between more than 5 patients, each in their own unique data record, without turning off the device
- The device must display patient vitals in both graphic and tabular views
- The device must allow a clinician to enter patient demographic data with on-screen QWERTY keyboard
- **Optional** – The device must allow clinician to enter provider narrative with on-screen QWERTY keyboard
- **Optional** – The device must dynamically compare parameters in graphic format on-screen with overlay of administered therapies, interventions, fluids, and/or drugs

### **ECG Monitoring and 12-Lead Recording**

- The device must sound an audible alarm for violations of ST segment elevation or depression
- The device must sound an audible alarm for violations of QT interval measurements
- The device must record 10-seconds of all 12 leads
- The software or data platform for the device must include 12-lead analysis and measurement tools (electronic calipers, et cetera) for the transmitted 12-lead without additional software, equipment, or tools
- The device must monitor ST elevation and render QT analysis and sound an alarm for violations

### **Non-invasive Blood Pressure Monitoring**

- The device must be validated for use on neonate, pediatric, and adult patients
- The device must be capable of taking multiple “back-to-back” blood pressures with a single setting for a set period of time

### **Pulse Oximetry Monitoring**

- The device must offer the full suite of measurements available with the Masimo Rainbow® technology algorithm, including Perfusion Index®

### **Microstream® End-Tidal Carbon Dioxide Monitoring**

- The device must offer the full suite of measurements available with the Microstream® technology algorithm

### **Field Expandable Parameters**

- The device must be capable of incorporating laryngoscopy, point-of-care ultrasound (POCUS) in field, and two-way audio communications without additional software or biomedical support
- Voice channel must be full duplex

### **Integrated Digital Camera/Video**

- The device must have no less than a 3.0MP integrated color camera/video recorder
- The camera/video recorder must have capability to transmit images to receiving center in real-time without added software or biomedical support

- Images received from the device can be annotated and sent back to the device
- The device must support streaming video for the use in telemedicine and/or alternate care center decision support

### **Biphasic Defibrillation Therapy**

- The device used for the delivery of electric therapy must be free of a therapy cable such that defibrillator pads plug directly into the defibrillator
- The device used for the delivery of electric therapy must have the latest AHA guidelines and be capable of upgrading to future guidelines via USB
- **Optional:** The device used for electric therapy can function independently as a standalone monitor

### **Data Management**

- The device must be able to reliably communicate data packets in minimal bandwidth areas without special software or biomedical support; preferred unit of measure to determine this requirement is either baud rate or bits per second
- The device must be capable of monitoring and storing up to 20 patient encounters for more than 48 hours
- The device must be able to export, or handoff, a patient data directly to another similarly configured device without intermediary software or biomedical support
- The device must be able to export a patient record directly to an email address in secured PDF format without intermediary software or biomedical support
- The device must be able to print a patient record directly to an external printer without intermediary software or biomedical support
- All data must transmit with multi-layer AES256 encryption and/or meet Federal cybersecurity FIPS 140-2 standard
- The device and supporting architecture must be capable of real-time and bidirectional transmission of clinical data, resuscitation, and emergency care informatics to a web-based dashboard without intermediary or proprietary software
- The device and supporting architecture must be capable of retrospectively viewing clinical data, resuscitation, and emergency care informatics to a web-based dashboard without intermediary or proprietary software

- The device must be capable of allowing providers to select up to 45 support centers to transmit live patient events without intermediary software or biomedical support
- The number of concurrent viewers in the web-based dashboard shall be more than 25
- The web-based dashboard shall immediately show real-time patient data of any properly configured device without intermediary or proprietary software at power on without additional interaction from the clinician
- The device must be capable of mirroring its display to a tablet such that clinicians outside the device line of sight can visualize the patient waveforms and vitals on the tablet
- The device must be capable of a fluid interface with electronic patient documentation and reporting across multiple platforms and operating systems.
- The device and supporting architecture must have a secure configuration tool available for PCs such that the organization can set and/or change the behavior of the device