

MISSISSIPPI STATE
UNIVERSITY FORM P-4
Telephone: (662) 325-2550

THIS IS NOT AN
ORDER

[illegible]

Specifications of High Speed Camera

Camera system shall meet the following minimum requirements:

1. Resolution: minimum of 924 x 768 pixels per frame at all frame rates up to the max frame rate.
2. Number of frames: minimum of 180 frames at all frame rates to up to the max frame rate.
3. Frame Rate: capable of frame rates from 1000 fps to 5 Million fps continuously variable in increments of 1 fps. across the full range.
4. Exposure Times: capable of exposure times from 1/frame-rate down to 100 ns independent of frame rate.
5. Trigger Options: must have minimum of: Built in Velocity Trap for Start at time of arrival; Start on Trigger no delay; Delay Start with programable delay in 10 ns accuracy; Stop on Trigger with loop recording and trigger point programmable from 0 to 180 frames.
6. Synchronous operation: up to two cameras to be able to run in synch with each other within 5 ns timing.
7. Capping Shutter: must have electromechanical capping shutter to protect sensor.
8. Output Triggers and Synch: must have at least four programmable output triggers to drive external devices including flash lamps and lasers in synch with the frames.
9. Focus Mode: must have live video focus mode with programable exposure times.
10. Lens Mount: must have ruggedized mount with manual aperture control of auto iris lenses.
11. Control: must have GBit Ethernet for fast control and download of images.

ATTACHMENT 1

GENERAL CONDITIONS (MSU September 2007 Edition)

Bidders must comply with all rules, regulations and statutes relating to purchasing in the State of Mississippi in addition to the requirements of this form.

ALL BIDS SUBMITTED MUST BE IN COMPLIANCE WITH THE GENERAL CONDITIONS SET FORTH HEREIN. ALL VENDORS ARE OBLIGATED TO READ, UNDERSTAND, AND AGREE TO THESE CONDITIONS WHEN SUBMITTING A BID FOR A BID TO BE CONSIDERED RESPONSIVE.

1. PREPARATION OF BIDS

- 1.1 Failure to examine any drawings, specifications, and instructions will be at bidder's risk.
- 1.2 All prices and notations must be printed in ink or typewritten. No erasures permitted. Errors may be crossed out and corrections printed in ink or typewritten adjacent, and must be initialed in ink by person signing bid.
- 1.3 Pricing must be quoted on a "per unit" basis, extended as indicated. Any trade discounts included must be itemized and deducted from extended prices. Bidder guarantees product or service offered will meet or exceed specifications included as part of this Invitation for Bid. Bid prices must be net. In case of error in the extension of prices in the bid, the unit price will govern. No bid shall be altered or amended after the specified time for opening bids.
- 1.4 Brand Names: Any reference to brand names and numbers in the Invitation for Bids is descriptive, but not restrictive, unless otherwise specified. Bids on equivalent items meeting the standards of quality thereby indicated will be considered, unless otherwise specified, providing the bid clearly describes the article offered and how it differs from the referenced brands. If equipment or supplies of another brand or of other construction than that specified herein is offered by bidder, such bidder shall set forth in his bid a detailed statement indicating wherein each item offered deviates from these specifications. Unless the bidder specifies otherwise in his bid, it is understood that the bidder is offering a referenced brand item as specified in the Invitation for Bids. Mississippi State University reserves the right to determine whether a substitute offer is equivalent to and meets the standard of quality indicated by the brand name referenced, and Mississippi State University may require a bidder offering a substitute to supply additional descriptive material and a sample. When merchandise received from a successful bidder is not considered an equal by the requisitioner, it will be returned to the vendor, shipping charges collect.
- 1.5 Specification: It is understood that reference to available specifications shall be sufficient to make the terms of such specifications binding on the contractor.
- 1.6 Information and Descriptive Literature: Bidders must furnish all information requested in the spaces provided on the bid form. Further, as may be applicable, each bidder must submit for bid evaluation cuts, sketches, and descriptive literature and technical specifications covering the product offered. Reference to literature submitted with a previous bid or on file with the buyer will not satisfy this provision.
- 1.7 Samples: Samples of items, when called for, must be furnished free of expense, and if not destroyed in testing will, upon request, be returned at the bidder's expense. Request for the return of samples must be made within ten (10) days following opening bids. Each individual sample must be labeled with bidder's name, manufacturer's brand name and number, bid number and item reference.
- 1.8 Time of performance: The number of calendar days in which delivery will be made after receipt of order shall be stated in the bid. Bid should show number of days required to place material in receiving agency's designated location under normal conditions. Failure to state delivery time obligates supplier to complete delivery in 14 calendar days. Unrealistically short or long delivery promises may cause bid to be disregarded. If delay is foreseen, supplier shall give written notice to MSU. MSU has the right to extend delivery date if reasons appear valid to MSU. Default in promised delivery (without accepted reasons) or failure to meet specifications authorizes MSU to purchase supplies elsewhere and charge full increase, if any, in cost and handling to defaulting supplier. No substitutions or cancellation permitted without written approval of the MSU DEPARTMENT OF PROCUREMENT AND CONTRACTS. Delivery shall be made during normal working hours only, unless prior approval for late delivery has been obtained from MSU.

2. SUBMISSION OF BIDS

- 2.1 Bids must be signed and sealed with bidder's name and address on outside of envelope, and the time and date of the bid opening and the bid file number shown in the lower-left corner of the envelope.
- 2.2 Bids and modifications or corrections thereof received after the closing time specified will not be considered.
- 2.3 Only bids submitted on bid forms furnished by Mississippi State University or copies thereof will be considered. Name of person executing bid must be in longhand.
- 2.4 Bids shall be submitted F.O.B. destination. Bids not submitted F.O.B. destination will not be considered. We do not accept fax bids.

3. ACCEPTANCE OF BIDS

MSU reserves the right to accept or reject all or any part of any bid, waive minor technicalities and award the bid to best serve the interests of the State. If a bidder fails to state the time within which a bid must be accepted, Mississippi State University shall have 60 days from bid opening date to accept.

4. DISCOUNT PERIOD

Time in connection with discount offered will be computed from date of delivery at destination, or from the date correct invoices are received, if the latter date is later than the date of delivery. Cash discounts will not be considered in the award process.

5. AWARD

- 5.1 A response to an IFB is an offer to contract with MSU based upon the terms, conditions and specifications contained in the IFB. Bids do not become contracts until they are accepted and an authorized purchase order is issued. The contract shall be governed, construed and interpreted under the laws of the State of Mississippi excluding its choice of law provisions. Contracts and purchases will be made or entered into with the lowest responsible bidder meeting specifications, except as otherwise specified in the Invitation. Where more than one item is specified in the Invitation, Mississippi State University reserves the right to determine the low bidder either on the basis of the individual items or on the basis of all items included in its Invitation for Bids, or as expressly provided in Mississippi State University Invitation for Bids.
- 5.2 Unless the bidder specified otherwise in the bid, Mississippi State University may accept any item or group of items of any kind. Mississippi State University reserves the right to modify or cancel in whole or in part its Invitation for Bids.
- 5.3 A Written purchase order or contract award mailed, or otherwise furnished, to the successful bidder within the time of acceptance specified in the Invitation for Bid results in a binding contract without further action by either party and without modification of MSU's terms and conditions regardless of any terms or conditions that the Bidder normally may have or use. The contract shall not be assignable by the vendor in whole or in part without the written consent of Mississippi State University.

6. INSPECTION

Final inspection and acceptance or rejection may be made at delivery destination, but all materials and workmanship shall be subject to inspection and test at all times and places, and when practicable. During manufacture, the right is reserved to reject articles which contain defective material and workmanship. Rejected material shall be removed by and at the expense of the contractor promptly after notification or rejection. Final inspection and acceptance or rejection of the materials or supplies shall be made as promptly as practicable, but failure to inspect and accept or reject materials or supplies shall not impose liability on the State of Mississippi or any subdivision thereof for such materials or supplies as are not in accordance with the specification. In the event necessity requires the use of materials or supplies not conforming to the specification, payment therefore may be made at a proper reduction in price. All goods will be subject to inspection and testing by MSU to the extent practicable at all times and places. Authorized MSU personnel shall have access to any supplier's place of business for the purpose of inspecting merchandise. Tests shall be performed on samples submitted with the bid or on samples taken from regular shipment. In the event products tested fail to meet or exceed all conditions and requirements of the specifications, the cost of the sample used and the cost of the testing shall be borne by the supplier. Goods which have been delivered and rejected in whole or in part may, at MSU's option, be returned to the supplier or held for disposition at supplier's risk and expense. Latent defects may result in revocation of acceptance.

7. TAXES

Mississippi State University is exempt from Federal excise taxes and state and local sales or use taxes and bidders must quote prices which do not include such taxes. Exemption certificates will be furnished upon request. Contractors making improvements to, additions to or repair work on real property on behalf of Mississippi State University are liable for any applicable sales or use tax on purchase of tangible personal property for use in connection with the contracts. Contractors are likewise liable for any applicable use tax on tangible personal property furnished to them by Mississippi State University for use in connection with their contracts.

8. GIFTS, REBATE, GRATUITIES

- 8.1 Acceptance of gifts from contractors prohibited. No officer or employee of the Office of Procurement and Contracts, nor any head of any state department, institution or agency, nor any employee of any state department, institution or agency charged with responsibility of initiating requisitions, shall accept or receive, directly or indirectly, from any person, firm or corporation to whom any contract for the purchase of materials, supplies, or equipment for the State of Mississippi may be awarded, by rebate, gifts, or otherwise, any money or anything of value whatsoever, or any promise, obligation or contract for future rewards or compensation.
- 8.2 Bidding by state employees prohibited. It is unlawful for any state official or employee to bid on, or sell, or offer for sale, any merchandise equipment or material, or similar commodity to the State of Mississippi during the tenure of his office or employment, or for the period prescribed by law thereafter, or to have any interest in the selling of the same to the State.

9. BID INFORMATION

Bid files may be examined during normal working hours by bid participants. Nonparticipants will be prohibited from obtaining any information relative to the bid until the official award has been made.

10. CONDITIONS

Should a conflict exist between the General Conditions and any Special Conditions, the Special Conditions shall take precedence if applicable.

11. WAIVER

The Office of Procurement and Contracts reserves the right to waive any General Condition, Special Condition, or minor specification deviation when considered to be in the best interest of Mississippi State University, so long as such waiver is not given so as to deliberately favor any single vendor and would have the same effect on all vendors.

12. CANCELLATION

Any Contract or item award may be canceled for cause by either party with the giving of 30 days written notice of intent to cancel. Cause for Mississippi State University to cancel shall include, but is not limited to, cost exceeding current market prices for comparable purchase; request for increase in prices during the period of the Contract; or failure to perform to Contract conditions. The Contractor will be required to honor all purchase orders that were prepared and dated prior to the date of expiration or cancellation if received by the Contractor within a period of 30 days following the date of expiration or cancellation. Cancellation by Mississippi State University does not relieve the Contractor of any liability arising out of a default or nonperformance. Cause for the vendor to cancel shall include, but is not limited to, the item(s) being discontinued and unavailable from the manufacturer.

13. SUBSTITUTIONS DURING CONTRACT

During the term of a contract if adequate documentation is provided that supports the claim that the contract item(s) are not available, then items which meet the minimum specifications may be substituted if approved by the Office of Procurement and Contracts and are deemed to be in the best interest of Mississippi State University.

14. APPLICATION

14.1 It is understood and agreed by the Vendor that this contract is entered into solely for the convenience of Mississippi State University and all purchases made by MSU for products included under the provisions of this contract shall be purchased from the vendor receiving the award unless exempt by special authorization from the Office of Procurement and Contracts. Employees of the Office of Procurement and Contracts have acted exclusively as employees of Mississippi State University for the award, consummation, administration and all other matters related to this contract and are not liable for any performance or nonperformance by Mississippi State University.

14.2 The supplier agrees to protect MSU from claims involving infringement of patents or copyrights.

14.3 Supplier hereby assigns to MSU any and all claims for overcharges associated with this contract which arise under the antitrust laws of the United States 15 U.S.C.A. Section 1, et seq. (1973), and which arise under the antitrust laws of the State of Mississippi.

14.4 Signing this bid with a false statement is a material violation and shall void the submitted bid or any resulting contracts, and the bidder shall be removed from all bid lists. By signature hereon affixed, the bidder hereby certifies that:

14.4.1 The bidder has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted bid.

14.4.2 The bidder is not currently delinquent in the payment of any franchise tax owed the State of Mississippi.

14.4.3 The bidder certifies that the individual or business entity named in this bid is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and/or payment withheld if this certification is inaccurate. Neither the bidder nor the firm, corporation, partnership or institution represented by the bidder, or anyone acting for such firm, corporation or institution has violated the antitrust laws of this State, or the Federal Antitrust Laws, nor communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business.

14.4.4 The bidder has not received compensation for participation in the preparation of the specifications for this IFB.

14.4.5 The supplier shall defend, indemnify, and hold harmless the State of Mississippi, all of its officers, agents and employees from and against all claims, actions, suits, demands, proceedings costs, damages, and liabilities, from any acts or omissions of supplier or any agent, employee, subcontractor, or supplier of supplier in the execution or performance of this purchase order.

14.4.6 Bidder agrees that any payments due under this contract will be applied towards any debt, including but not limited to delinquent taxes and child support that is owed to the State of Mississippi.

- 14.5 Any terms and conditions attached to a bid will not be considered unless the bidder specifically refers to them on the front of this bid form and encloses a legible and complete copy of the same without the need for further reference to any other document or source of information.

WARNING: Such terms and conditions may result in disqualification of the bid (e.g. bids with the laws of a State other than Mississippi, requirements for prepayment, limitations on remedies, etc.).

- 14.6 Information, documentation, and other material in connection with this solicitation or any resulting contract may be subject to public disclosure pursuant to the Mississippi Public Records Act.

16. ADDENDA

Addenda modifying plans and/or specifications may be issued if time permits. Should it become necessary to issue an addendum within the three-day period prior to the bid opening, the bid date will be reset giving bidders ample time to answer the addendum. When replying to a bid request on which an addendum has been issued, the bid shall indicate that provisions of the addendum have been noted and that the bid is being offered in compliance therewith. Failure to make this statement may result in the bid being rejected as not being in accordance with the revised specifications or plans.

17. ALTERNATE BIDS

Alternate bids unless specifically requested will not be considered. An alternate is considered to be a bid that does not comply with the minimum provisions of the specification.

18. SPECIFICATION CLARIFICATION

Inquiries pertaining to IFBs must include the IFB number and opening date. It shall be incumbent upon all bidders to understand the provisions of the specification and to obtain clarification from the MSU Office of Procurement and Contracts prior to the time and date set for the bid opening. Such clarification will be answered only in response to a written request. No clarification will be offered as a response to a telephone request.

19. BID OPENINGS

Bid openings will be conducted open to the public. However, they will serve only to open, read and tabulate the bid price on each bid. No discussion will be entered into with any vendor as to the quality or provisions of the specifications and no award will be made either stated or implied at the bid opening.

20. PAYMENT

Supplier shall submit one copy of an itemized invoice showing order number and agency purchase order number. MSU will incur no penalty for late payment if payment is made in 45 or fewer days from receipt of goods or services and an uncontested invoice.

21. FIRM BID PRICE

Prices quoted shall be firm for the term of the contract except that Mississippi State University shall receive the benefit of any price decrease in excess of five per cent (5). The contractor must provide written price reduction information within ten (10) days of its effective date.

22. EQUAL EMPLOYMENT OPPORTUNITY

This purchase will be subject to the provisions of Executive Order 11246 if it is not otherwise exempt. Except in contracts exempted in accordance with Section 204 of the Executive Order 11246, As Amended, all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions. During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965,

and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States." [Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

END OF GENERAL CONDITIONS

ATTACHMENT 2

SPECIAL CONDITIONS

Bidders must comply with all rules, regulations and statutes relating to purchasing in the State of Mississippi in addition to the requirements of this form.

- ☐ None
- ☐ See Attached Drawings, Specifications or Instructions