



# Mississippi State

UNIVERSITY

July 9, 2018

Re: 18-74, Addendum #1, MWIR

To Whom It May Concern:

Please note the new Invitation for Bid form and the new specifications. Place your bid on new form.

**Addendum: Acknowledge the receipt of each addendum by writing on the bid form the number of the addendum and the date received.**

Thank you

A handwritten signature in cursive script that reads "Debra Raines".

Debra Raines  
Bid Specialist

### INVITATION FOR BIDS

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.

THIS IS NOT AN  
ORDER

Sealed bids will be received in the Office of Procurement and Contracts, Mississippi State University, Mississippi State, Mississippi for the purchase of items listed below. All bids must be received in the Office of Procurement and Contracts before the bid opening time given below. Delivery of bids must be during normal MSU working hours. These are 8:00 a.m. to 5:00 p.m. CST/CDT, except for weekends and holidays when no delivery is possible. Additional Bidding Requirements and Terms and Conditions are contained in Attachment 1, entitled GENERAL CONDITIONS, to this P-4 form, which requirements, terms, and conditions are incorporated herein by reference. MSU SPECIAL CONDITIONS, if any, are attached here to as Attachment 2 and incorporated herein by reference.

**PROCUREMENT & CONTRACTS**

Bid File No: 18-74

P.O. Box 5307

Mississippi State, MS 39762

**PLEASE MAIL IN WINDOW ENVELOPE  
OR ADDRESS AS INDICATED AT LEFT**

**BID OPENING DATE AND TIME:**

July 25, 2018 @ 2:00 p.m.

ITEM	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
1		<p>MID-WAVE INFRARED (MWIR) IMAGING SYSTEM FOR FOOD SAFETY RESEARCH. THIS SYSTEM SHALL MEET OR EXCEED THE FOLLOWING REQUIREMENTS. PER ATTACHED SPECIFICATIONS</p> <p>RFX - 3160002350</p> <p>BIDDERS SHALL SUBMIT THEIR BIDS, EITHER, IN A SEALED ENVELOPE OR ELECTRONICALLY. SEALED BIDS SHALL INCLUDE THE BID NUMBER ON THE FACE OF THE ENVELOPE, AS WELL AS THE NAME OF THE BIDDER. FOR ELECTRONIC BIDS, THE BIDDER SHALL GO TO THE FOLLOWING SITE; <a href="https://www.ms.gov/dfa/contract_bid_search">https:// www.ms.gov/dfa/contract_bid_search</a></p> <p><b>ALL QUESTIONS REGARDING THIS BID SHOULD BE DIRECTED TO THE OFFICE OF PROCUREMENT AND CONTRACTS AT 662-325-2550</b></p> <p><b>When using a delivery service or hand delivering, the address is: 245 Barr Avenue, 610 McArthur Hall, Mississippi State, MS 39762</b></p>	\$ _____	\$ _____
Vendor Name and Address		Authorized Signature	Terms	
		Title	Please Bid FOB Destination	
Telephone No:		Company Bid No.	Method of Shipment	
Date:		Offer Firm for _____ days	Delivery can be made in _____ Days	

The Mississippi State University Geosystems Research Institute is requesting bids for a mid-wave infrared (MWIR) imaging system for food safety research. This system shall meet or exceed the following requirements:

- The spectral range is 3000 – 5000 nm
- 640 pixel x 512 pixel InSb detector
- 15um x 15um pixel pitch
- 14 bit dynamic range
- Need to include 4x microscope lens
- Greater than 99.8% operability (99.95% typical)
- NEΔT of 20mK or less
- Supports integration time from 480nS to full frame time
- Frame rates of 640x512 @ 60 frames/sec, with the ability to window down to 160x120 @ 480frames/sec
- Asynchronous Integrate While Read or Asynchronous Integrate Then Read read-out modes
- Adjustable Digital Gain and Offset to map linear portion of the FPA to the full range of the digital count values
- Command & Control available by Gigabit Ethernet directly off of back camera panel. Secondary external adapter boxes are not acceptable.
- Digital data available on Gigabit Ethernet
- Analog Video Output selectable as NTSC/PAL (via B-N-C)
- Analog Video output available in all frame rates, integration times, and window sizes
- Ability to create Non Uniformity Corrections on the camera & apply them independently on analog & digital output
- Sync-In for triggering the camera to external devices – via B-N-C, software shall be compatible with recording triggered frames
- Weight less than 5 lbs without lens
- Mounting 1/4" – 20 threaded base plate
- Operational to 10,000 ft
- -40 C to +50 C Operational environment
- Connecting the camera to a PC via the camera USB digital port or GigE port provides analysis of fully temperature calibrated video using the software.
- Included software must allow for the recording of static imagery or a collection of image sequences.
- Included software must offer compatibility with the most common IR camera image formats.
- Included software must be able to store images as IR images, standard jpeg, standard ASCII (comma separated values .csv) and sequences of images as sequence files (.seq) or as a series of jpegs or as a .avi movie.
- Included software must provide time vs. temperature plots for each tool.
- Included software must support acquisition to memory to allow for burst recording at the maximum frame rate of the camera as well as acquisition to disk for longer recording periods at slower frame rates.
- Included software must be able to read out in degrees (C, F, K) or A/D counts.
- Factory training and technical support in the US must be available.
- Camera must come with a one year warranty with no restriction on hourly usage
- Camera must come with extended warranty options
- Camera must be serviced in the USA