



**INVITATION FOR BIDS**  
**OFFICE OF PROCUREMENT & CONTRACTS**

**1. INSTRUCTIONS FOR BIDDERS**

- a. Sealed bids will be received in the Office of Procurement & Contracts, Mississippi State University, for the purchase of the items listed herein.
- b. All bids must be received in the Office of Procurement & Contracts on or before the bid opening time and date listed herein. Delivery of bids must be during normal working hours, 8:00 a.m. to 5:00 p.m. CST, except on weekends and holidays when no delivery is possible.
- c. Bidders shall submit their bids either electronically or in a sealed envelope.
  - i. Sealed bids should include the bid number on the face of the envelope as well as the bidders' name and address. Bids should be mailed to: 245 Barr Avenue, 610 McArthur Hall, Mississippi State, MS 39762.
  - ii. At this time we only accept non-ITS bids electronically. For electronic submission of bids, go to: [https://www.ms.gov/dfa/contract bid search](https://www.ms.gov/dfa/contract_bid_search) and use the RFX number on the next page as your reference number.
- d. All questions regarding this bid should be directed to the Office of Procurement & Contracts at 662-325-2550.

**2. TERMS AND CONDITIONS**

- a. All bids should be bid "FOB Destination"
- b. Bidders must comply with all rules, regulations, and statutes relating to purchasing in the State of Mississippi, in addition to the requirements on this form. General Bid Terms and Conditions can be found here:  
[https://www.procurement.msstate.edu/procurement/bids/Bid\\_General\\_Terms\\_May\\_2019\\_V2.pdf](https://www.procurement.msstate.edu/procurement/bids/Bid_General_Terms_May_2019_V2.pdf)
- c. Any contract resulting from this Invitation for Bid shall be in substantial compliance with Mississippi State University's Standard Contract Addendum:  
<https://www.procurement.msstate.edu/contracts/standardaddendum.pdf>

**Bid Number/RFX Number: 20-83/RFX#3160003851**

**Opening Date: September 1, 2020 @2:00 p.m.**

**Description: Spectroradiometer**

Vendor Name: \_\_\_\_\_

Vendor Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Days the Offer is Firm: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Item	Quantity	Description	Unit Price	Total Price
1	1	Spectroradiometer		

The Mississippi State University, Geosystems Research Institute, request bids for an **Spectroradiometer** to determine crops and soil health status. This system shall meet the following requirements:

- Mass of less than 3.5 kg
- The unit should have a wide spectral range (350-2500 nm)
- Spectral resolution  $\leq 2.8$  nm @ 700 nm,  $\leq 8$  nm @1500nm,  $\leq 6$  nm @ 2100nm
- Noise Equivalence Radiance (NER)  $\leq 0.5 \times 10^{-9}$  W/cm<sup>2</sup>/nm/sr @400nm  
 $\leq 0.8 \times 10^{-9}$  W/cm<sup>2</sup>/nm/sr @1500nm  
 $\leq 1.0 \times 10^{-9}$  W/cm<sup>2</sup>/nm/sr @2100nm
- Shall have the capacity to measure plant and soil samples non-invasively both under field and controlled-environment conditions
- The instrument shall provide field-proven reflectance contact probe and single-handed leaf-clip with integrated calibration reference.
- The leaf-clip contact probe shall have an integrated light source remote from the sample to prevent leaf burn damage.
- The fiber optic holder shall have a pistol grip with integrated triggering system and tripod mounting hole.
- The fiber optic shall have a quick release connection to the accessories.

- Self-contained power source capable of powering total system and accessories for more than 4 hours under field conditions. It should include at least a pair of rechargeable batteries and the main power supply assembly.
- The instrument should have a different field of view of lenses options including direct attachment of 4, 8, or 14° lenses, 25° fiber optic.
- Should have the capacity collect and store >1,000 spectra without a computer/laptop/ tablet
- Protective travel case, padded shoulder strap, and backpack
- Handheld tablet capabilities to connect via Bluetooth with GPS and software package
- Data acquisition software shall be compatible with Windows 10 operating system and should be user friendly - preloaded multiple users software on USB flash drive.
- Shall have a minimum of 2 Tripod mounting holes
- Handheld tablet capabilities to connect via Bluetooth with GPS and software package
- Data acquisition software shall include an automatic calculation module for vegetative and other Indices
- The instrument controller shall operate with Windows 10 tablet and laptop devices via Bluetooth and USB.
- Instrument operating temperature range from -5 to 45° C
- Shall be environmentally sealed to protect it against dirt, dust and moisture
- Must use high-precision industry-standard technology.
- Reproducibility of wavelength 0.1 nm
- Wavelength accuracy  $\pm 0.5$  bandwidth
- Must write all output data to a single storage device
- Must include 2 years of software and hardware support and warranty