Mississippi State University Notice of Proposed Sole Source Purchase

167-80

Mississippi State University anticipates purchasing the item(s) listed below as a sole source purchase. Anyone objecting to this purchase shall follow the procedures outlined below.

1. Commodity or commodities to be purchased (make, model, description):

- **P-025.40P**: PICA Power Piezo Actuator, 60μm, OD25xL60mm
- P-025.80P: PICA Power Piezo Actuator, 120µm, OD25xL113mm
- P-202.06: PICA HVPZT Cable LEMO / Open End, 0.6 m
- E-482.00: Qty 2-PICA High-Power Piezo Driver/Controller with Energy Recovery, 1050V, 6 A, 19"
- P-056.40P: PICA Power Piezo Actuator, 60μm, OD56xL63mm

2. Explanation of the need to be fulfilled by this item(s) and why it is the only one that can meet the specific needs of the department:

For the Center for Advanced Vehicular Systems (CAVS), we need to have a high powered piezoelectric system for controlling our newly developed dynamic biological intermediate bar for mechanical testing of materials related to CAVS funded projects. In the frame of our dynamic mechanical testing, one of our main requirements is to have full control over the speed of the tests in order to be able to determine the performance of new materials designed by CAVS and received in CAVS funded projects.

The PICA piezoelectric system, including the E-482 controller and power piezo actuators, will enable us to control the speed dynamic mechanical tests. This is the only commercial product with the power, force, and speed rating needed to cover the necessary testing range of our materials. The PI system speed is 10 kHz, the power is 6 kW, and the force is 60 kN. The closest competitor is the Peizodrive PDUS200 which has a 0.2 kW power and their SB070740 actuator only has 1.4 kN force.

3. Name of company/individual selling the item and why that source is the only possible source that can provide the required item(s):

The **PICA piezoelectric system** is the only commercial product that includes the high power controller and processing for high speed-force control. PI (Physik Instrumente) L.P. is the only company that sells this system.

4. Estimated cost of item(s) and an explanation why the amount to be expended is considered reasonable:

The system price was negotiated extensively to get the best possible price. We were able to negotiate the system price down from the the original price of \$36,413 to the current quoted price (\$33,413). We found the pricing reasonable considering configurability of the instrument and the specifications that we required. PI's engineers discussed heavily our applications we were able to specify the system for CAVS Computational Engineering Mechanical and Materials Science (CEMMS) group so that this system will work with many other materials such as metals, polymers, biological materials, and composites. This system will save us several years of our own implementation work with the most accurate speed control currently possible.

5. Explanation of the efforts taken by the department to determine this is the only source and the efforts used to obtain the best possible price:

We did a thorough review of the market for this kind of equipment and could find no other producer or seller of equipment with this capability. The PICA piezoelectric system is the only commercial product that meets our research needs (high power, high speed, high force). We believe that this is the best possible price in an area where the techniques and technologies are recently emerging and do not have a mass-product sales market.

Any person or entity that objects and proposes that the commodity listed is not sole source and can be provided by another person or entity shall submit a written notice to:

Don Buffum, CPPO
Director of Procurement & Contracts
dbuffum@procurement.msstate.edu
Subject Line must read "Sole Source Objection"

The notice shall contain a detailed explanation of why the commodity is not a sole source procurement. Appropriate documentation shall also be submitted if applicable.

If after a review of the submitted notice and documents, MSU determines that the commodity in the proposed sole source request can be provided by another person or entity, then MSU will withdraw the sole source request publication from the procurement portal website and submit the procurement of the commodity to an advertised competitive bid or selection process.

If MSU determines after review that there is only one (1) source for the required commodity, then MSU will appeal to the Public Procurement Review Board. MSU will have the burden of proving that the commodity is only provided by one (1) source.



March 29, 2017

Wil Whittington Mississippi State University Center for Advanced Vehicular Systems (CAVS) 200 Research blvd. Starkville , MS 39759

Phone: 662-325-8558

Email: wrw51@cavs.msstate.edu

Subject:PICA

Pl Quote #:

Q-267712-2

IC Quote#:

Kindly include this Quotation with your Order

Dear Wil:

Thank you for your request and interest in PI. We are glad to hear that you are considering our PI products for your application

Pos.	Qty.	Part No.	Description	Unit Price	Total Price
10	1	P-025.40P	PICA Power Piezo Actuator, 60µm, OD25xL60mm	\$2,042.00	\$2,042.00
20	1	P-025.80P	PICA Power Piezo Actuator, 120µm, OD25xL113mm	\$3,736.00	\$3,736.00
30	2	P-202.06	PICA HVPZT Cable LEMO / Open End, 0.6 m	\$64.00	\$128.00
40	1	E-482.00	PICA High-Power Piezo Driver/Controller with Energy Recovery, 1050V, 6 A, 19"	\$20,499.00	\$20,499.00
50	1	P-056.40P	PICA Power Piezo Actuator, 60µm, OD56xL63mm	\$7,008.00	\$7,008.00

TOTAL: \$33,413.00

Lead Time: 4 to 6 weeks ARO.

If you have any questions please don't hesitate to call me at 508-832-3456 231 or email me at the address below. We appreciate your interest and look forward to serving you.

Best Regards,

John Carroll Applications Sales Engineer Email: JohnC@pi-usa.us Phone: 508-832-3456 231



Addendum: Ordering and Warranty Information

All **PI** products can be ordered through the following address:

PI (Physik Instrumente) L.P. 16 Albert Street Auburn, MA 01501

508-832 3456 (phone) 508-832 0506 (Fax) orders@pi-usa.us (email)

All products or systems quoted are guaranteed to be free of defects in materials or workmanship for a period of one year from date of invoice. Piezoelectric products are not warranted against mechanical damage resulting from improper use wherein excessive force or voltages are applied that are outside specified ranges, or for the use of power supplies or amplifiers not sold by PI unless such use is expressly approved in writing by PI.

The following notes also apply:

- 1. Prices are FOB Shipping Point
- 2. Payment terms are Net 30. Payment terms are subject to PI credit approval at receipt of purchase order and prior to shipment.
- 3. Quoted delivery is valid at this time and is subject to change based on receipt prior orders. Actual delivery will be determined when the order is received.
- 4. Credit cards are accepted for orders up to \$3,000. A Credit Card Order Form is available at: http://pi-usa.us/CCOrderForm.pdf
- 5. Standard PI Terms & Conditions apply.
- 6. Purchase orders issued for items on this quotation acknowledge acceptance of all stated terms and conditions.

For Terms and Conditions refer to: http://www.pi-usa.us/TC-PI05.pdf

General Software License Agreement: http://www.pi-usa.us/EULA.pdf