

INVITATION FOR QUOTATION

TEQIP-II/2016/GJ1G07/Shopping/113/

13-Jun-2016

To,

Sub: Invitation for Quotations for supply of Goods

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	Brief Description	Quantity	Delivery Period(In days)	Place of Delivery	Installation Requirement (if any)
1	Supervisory Control and Data Acquisition System Trainer	1	60	GOVERNMENT ENGINEERING COLLEGE, SECTOR-28, GANDHINAGAR. GUJARAT PIN- 382028	YES

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase II** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.
3. Quotation,
 - 3.1 The contract shall be for the full quantity as described above.
 - 3.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
 - 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price.
 - 3.4 Applicable taxes shall be quoted separately for all items.

3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.

3.6 The Prices should be quoted in Indian Rupees only.

4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **55** days after the last date of quotation submission.

6. Evaluation of Quotations,

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

6.1 are properly signed ; and

6.2 confirm to the terms and conditions, and specifications.

7. The Quotations would be evaluated for all items together.

8. Award of contract:

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

9. Payment shall be made in Indian Rupees as follows:

Delivery and Installation - 0% of total cost
Satisfactory Acceptance - 100% of total cost

10. All supplied items are under warranty of **24** months from the date of successful acceptance of items.

11. You are requested to provide your offer latest by **15:00** hours on **27-Jun-2016** .

12. Detailed specifications of the items are at Annexure I.

13. Training Clause (if any) **Training and demonstration should be provided as per the requirements after successful installation at the institute.**

14. Testing/Installation Clause (if any) **SUCCESSFUL INSTALLATION & SATISFACTORY PERFORMANCE.**

15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.

16. Sealed quotation to be submitted/ delivered at the address mentioned below,
Government Engineering College Nr. Animal Vaccine Institute Sector-28 Gandhinagar

17. We look forward to receiving your quotation and thank you for your interest in this project.

(Authorized Signatory)
Name & Designation

Annexure I

Sr. No	Item Name	Specifications
1	Superviosory Control and Data Acquisition System Trainer	As per Annexure

Annexure

I/O modules converters and SCADA Software Specification

The I/O modules must have following features:

Input Modules:

1. RTD module with Modbus and Ethernet should contain following:
 - Minimum 4 differentials channels
 - It should have burn-out detection
 - 2, 3 wire input connections
 - Resolution 16-bit or higher
 - Sampling Rate 10 sample/second or higher
 - Accuracy $\pm 0.1\%$ or better
 - Minimum zero and span drift preferable
2. Thermistor Module with Modbus and Ethernet should contain following:
 - Minimum 6 differentials channels
 - It should have burn-out detection
 - 2, 3 wire input connections
 - Resolution 16-bit or higher
 - Sampling Rate 10 sample/second or higher
 - Accuracy $\pm 0.1\%$ or better
 - Minimum zero and span drift preferable
3. Universal analog input module with Modbus and Ethernet should contain following:
 - Minimum 8 differentials channels (Individual Inputs preferable)
 - Input Type: Thermocouple(Universal is preferable), mV, V, mA
 - Burn out detection for all kind of inputs
 - Minimum input impedance: 20 M Ω for voltage and 120 Ω for current
 - Minimum isolation voltage is 3000 VDC
 - Resolution 16-bit or higher
 - Sampling Rate 10 sample/second or higher
 - Accuracy $\pm 0.1\%$ or better
4. Digital Input Module(isolated) with Modbus and Ethernet
 - Minimum 16 differentials channels
 - Input voltage range: Minimum 40 V
 - Input levels should be standard

It should have overvoltage protection: minimum: 70 VDC (Higher voltage is preferable)

It should withstand against different operating conditions like reverse polarity, operating temperature: 10 to 70 (higher preferable) degree and humidity: minimum 90% RH

It should operate on standard regulated power supply

Output Modules:

1. Analog Output Module with Modbus and Ethernet should contain following:
 - Minimum 4 differentials channels
 - Output Type: mV, V, mA (all standard range preferable)
 - Lower input impedance is preferable for all types of inputs
 - Accuracy $\pm 0.1\%$ or better
 - Minimum zero and span drift preferable
 - Resolution 12-bit or higher
 - Minimum isolation voltage is 3000 VDC
 - Current Load Resistor (source): minimum 500 Ω
2. Power Relay Output Module with Modbus and Ethernet should contain following:
 - Minimum 4 differentials channels
3. Counter Module should contain following:
 - 2 independent channels with overflow flag (higher range of operational frequency is preferable)
 - It should have data flow control ability
 - Minimum isolation voltage is 2500 VDC
 - Communication Protocol: Higher number of standard protocols preferable
 - Longer distance for communication is preferable
 - Interface: RS232 and other additional standard modes preferable
4. Isolated Digital Output Modules with Modbus should contain following:
 - Digital Output: minimum 12 Channels with VCC: 10 ~ 35 VDC and Current: 1A (per channel)
 - Digital Output Type: Source
 - Over Current Detection and Protection preferable
 - Minimum isolation voltage is 3000 VDC

Converters:

Following conversion operations with high speed and resolution is required:

- RS-232 to RS-422/485 Converter (Isolated)
- RS-232/422/485 serial device servers (minimum 1-port)
- RS-232/422/485 USB-to-serial converters (minimum 1-port)
- Wireless Device Server, 3-in-1 as per standards (minimum 1-port)
- RS-232/422/485 Modbus TCP to Serial Communication Gateway (minimum 1-port)

Networking Related:

Wireless Gigabit Broadband Router with minimum speed of 300 Mbps
Ethernet remote I/O with 2-port Ethernet switch for daisy-chain topologies

Universal regulated power supply for smooth conduction of the I/O modules, converter and networking related items.

Note: Wi-Fi compatibility for all the devices is preferable.

The offered SCADA software must have following features and functionality

Major functions and features:

- Data Acquisition and Logging
- Historical data storage
- Reports in excel and other common format
- Web based reports
- Graphing and Trends
- Capable to provide process recipes
- Package must comprises of advanced symbol library
- Alarm system adhering the industrial standard
- Remote location control for mobile devices (minimum 100 nodes)
- Web based development facility

Communication supports:

- Capable to communicate with all major serial and Ethernet based PLC
- Modbus RTU/TCP/ASCII master and slave
- Interfacing module and driver for common PLC like Allen Bradley, Siemens , TwinCAT , Omron, Mitsubishi etc.
- Interfacing module and driver for controller based cards
- Web server connectivity
- OPC client for any OPC server facility

Licensing:

- Number of license - 20 (runtime and development)
- License must be of perpetual type
- License type – USB or software key
- License activation using activation ID only
- The prescribe license shall be also able to work on individual workstation (independent to network) as well to networking station.
- **There must be provision for license transfer from one system to another in case of unfortunate circumstances.**

Compatibility:

- **It must be compatible with Windows XP, Windows 7 and higher version for 32 bit and 64 bit operating system.**

Support and Documentation:

- The software shall be on DVD with required license keys
- Must be supported with detailed documentation on full operational procedure in print version
- Must include two years software updation free of cost.
- Life time support for license restoring in case of system failure or other unseen circumstances.

Standard Accessories: Detailed Instruction & experimental manual and other mandatory accessories to complete experimental requirement of the trainer.

All the mentioned standard I/O Modules, Converter, Router and other accessories should be compatible to the required SCADA software and PC having Window 7 & higher.

FORMAT FOR QUOTATION SUBMISSION
(In letterhead of the supplier with seal)

Date: _____

To: _____

Sl. No.	Description of goods (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Amount in figures) (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of _____ months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No: _____