

**COLLEGE OF ENGINEERING TRIVANDRUM
Thiruvananthapuram -16**

NOTICE INVITING TENDER

No. P5/2158/24/CET

10-01-2025

Tender ID	: 2025_DTE_72941_1
Tender No:	: 38/P5/CSYS/25/CSD
Superscription	: Purchase of Control System in Centre for Sustainable Development
Last date and time of receipt of tender on the website (www.etenders.kerala.gov.in)	: 28/01/2025 3 pm
Date and time of opening of tender	: 31/01/2025 3PM
Date up to which the rates are to be firm	:
Tender Fee	: ₹944/-(800 + 18 % GST) Rs..800/- should be paid to our department but GST amount of Rs. 144/- should be paid to GST department directly by the bidder)
EMD required	: ₹ 4000/-

SL NO	ITEM	QTY	DESCRIPTION	PURPOSE
1	Control System (Design, development, and deployment of industrial standard biogas plant sensor-based data acquisition, iot based critical alarm notification and monitoring system with Android and ios application)	1	<ul style="list-style-type: none"> ● Sensor Package for 2xIntermediate Tank, pH and Level Measurement each tank (2 qty), ● Sensor Package for 2 x MR Tank, pH, temperature, pressure,e and Level Measurement each tank (2 qty), ● Sensor Package for 4 x HR Tank, pH, temperature, pressure, and Level Measurement each tank (4 qty), ● Centralized IoT panel for local monitoring(1 qty) ● Android+IOS App with the real-time analytics dashboard <ol style="list-style-type: none"> 1. with real-time online and offline data logging 2. Cloud data storage in CSV or Excel format 3. 6 months of data backup 4. 10 user access from the cloud 5. The app should contain an analytical dashboard and be capable of dynamic plotting 6. Alarm notifications for mobile apps 7. Subscription should be available lifetime 8. software package modification (if required) support 6 months <ul style="list-style-type: none"> ● Annual maintenance of all sensors ● Calibration kit and programs for all sensors ● Installation and commissioning should be included 	For conducting Research works related to High-Pressure biogas. The main purpose is to be used as the control and monitoring system for the biogas plant.

Sensor Specification

Sl No		Sensor	range	Alarm set point	unit	data logging	graph	thread type
1	HR 1	Temperature Sensor Probe 1	- 50 to + 120	65	degrecelsius	every 1 hr	x axis - hours between selected dates & x axis days between selected dates	1/2 " BSP
		Pressure Sensor Thread Type 1	2	1	bar	every 1 hr		1/2 " BSP
		Level Sensor	500	75%	mm	every 1 hr		1/2 " BSP
		pH Sensor	0 to 14	3 and 6.5		every 1 hr		1/2 " BSP
2	HR 2	Temperature Sensor Probe 1	- 50 to + 120	65	degcelcius	every 1 hr	x axis - hours between selected dates & x axis days between selected dates	1/2 " BSP
		Pressure Sensor Thread Type 1	2	1	bar	every 1 hr		1/2 " BSP
		Level Sensor	500	75%	mm	every 1 hr		1/2 " BSP
		pH Sensor	0 to 14	3 and 6.5		every 1 hr		1/2 " BSP
3	HR 3	Temperature Sensor Probe 1	- 50 to + 120	65	degcelcius	every 1 hr	x axis - hours between selected dates & x axis days between selected dates	1/2 " BSP
		Pressure Sensor Thread Type 1	2	1	bar	every 1 hr		1/2 " BSP
		Level Sensor	500	75%	mm	every 1 hr		1/2 " BSP
		pH Sensor	0 to 14	3 and 6.5		every 1 hr		1/2 " BSP
4	HR 4	Temperature Sensor Probe 1	- 50 to + 120	65	degcelcius	every 1 hr	x axis - hours between selected dates & x axis days between selected dates	1/2 " BSP
		Pressure Sensor Thread Type 1	2	1	bar	every 1 hr		1/2 " BSP
		Level Sensor	500	75%	mm	every 1 hr		1/2 " BSP
		pH Sensor	0 to 14	3 and 6.5		every 1 hr		1/2 " BSP
5	MR 1	Pressure Sensor Thread Type 1	10	6	bar	every 1 hr	x axis - hours between selected dates & x axis days between selected dates	1/2 " BSP
		Level Sensor	500	75%	mm	every 1 hr		1/2 " BSP
		pH Sensor	0 to 14	5 and 11		every 1 hr		1/2 " BSP
		Pressure Sensor Thread Type 1	10	6	bar	every 1 hr	x axis - hours between	1/2 " BSP
		Level Sensor	500	75%	mm	every 1 hr		1/2 " BSP

6	MR 2	pH Sensor	0 to 14	5 and 11		every 1 hr	selected dates & x axis days between selected dates	1/2 " BSP
7	IT 1	Level Sensor	500	75%	mm	every 1 hr	x axis - hours between selected dates & x axis days between selected dates	1/2 " BSP
		pH Sensor	0 to 14			every 1 hr		1/2 " BSP
8	IT 2	Level Sensor	500	75%	mm	every 1 hr	x axis - hours between selected dates & x axis days between selected dates	1/2 " BSP
		pH Sensor	0 to 14			every 1 hr		1/2 " BSP

General conditions

1. The unit price, all other charges such as delivery, transporting, packing, shipping, loading and unloading charges etc, and GST must be shown separately and should be furnished unambiguously.
2. Payment: 100 % after successful supply, installation, and satisfactory performance.
3. Delivery Period: Maximum Delivery period will be 90 days from the date of receipt of supply order.
4. The item should be supplied at **CSD, Mechanical Engineering of this institution**
5. The item should be have a minimum warranty of **One Year**
6. Agreement and tender form should be uploaded.
7. 5% security deposit along with agreement should be furnished in Rs.220/- Kerala Stamp Paper within a month/fortnight from the date of receipt of supply order.
8. Date of opening of tender : In case the proposed date declared as holiday, the tender will be opened on the next working day.
9. Only GST registered firms can participate in the Tender. GST number must be mentioned. The firm under composition scheme must mention the words "Composition taxable person" in their documents and should submit proof for that

NB: The Tender procedure will be made as per Rules mentioned in the Revised Store Purchase Manual.

The bidders should participate this tender through E-Tendering System. Tender cost and EMD should be submitted only through online.

Digitally Approved by
K SURESH
PRL CET

The document is digitally approved. Hence signature is not needed.