

No. F5(954)ST/MNIT/Com.Engg./2019/I

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NOTICE INVITING QUOTATIONS

1. **Registrar, Sponsored Research, MNIT, JLN Marg, Jaipur** invites sealed tenders for the supply of **“Smart City IOT Sensors and Related Equipment’s”** for **Department of Computer Science & Engineering** of this Institute in **Single bid system**. As per schedule given below

Event	Date & Time
Download of Tender	18.12.2020
Bid submission last date & time	08.01.2021 by 2.00 PM
Quotation will be opened at	08.01.2021 at 3.00 PM
Earnest Money	Rs.10,000/- (Kindly attached the RTGS details with cancelled cheque along with the Earnest Money)

Quotation must be enclosed in a properly sealed envelope addressed to the MNIT, Jaipur with kind attention to Deputy Registrar (S&P), MNIT, Jawahar Lal Nehru Marg, Jaipur -302017 by designation and not by name. The quotations must be super scribed “Quotations for the supply of **Smart City IOT Sensors and Related Equipment’s** ----- as called for in Tender Notice No. ----- dated _____”DUE ON----- AT -----AM/PM. The Quotation must reach on or before -----AM/ PM on or before the due date and time mentioned in the tender notice/tender document. The documents must be dropped in the tender box available in Central Store during office hours (9.30am to 6.00pm) on all working days. Bids delivered to any other place or any individual shall not be considered as valid document. Quotations sent by e-mail will not be considered valid. Tender documents may be downloaded from institute’s web site www.mnit.ac.in and CPPP site <https://eprocure.gov.in/epublish/app>

2. **THE RATES QUOTED SHOULD BE F.O.R. JAIPUR** inclusive of all charges e.g. packing, forwarding, transit insurance, for outside firms and free delivery at Institute stores in the case of local firms. The rates may also be quoted separately "ex-godown/F.O.R. dispatching station. In case of Ex-Godown rates, please mention your packing and forwarding charges.
3. As far as possible, quotations should be given for goods of India manufacture which are readily available. Foreign goods quoted and proposed to be supplied should be covered by normal import quota of the dealer. This institute is exempted from payment of custom duty.
4. Detailed specifications and "make" of each item should be clearly given supported by the illustrated pamphlets wherever possible. Quotations without specifying the make and other particulars may be rejected. The accessories included in the equipment should also be clearly mentioned.

5. Losses or damage in transit will be in to the account of the supplier in case of rates **F.O.R. JAIPUR**. The supplier may, if he so desires, get the goods insured and include such charges in the tendered rate.
6. The payment for the ordered items would be made after the articles have been received and found in order. **Payment will be made by RTGS. Kindly send the RTGS details and cancelled cheque along with the Invoice. The payment to foreign supplier will be made through FDD/Wire Transfer OR Letter of Credit as the case may be.**
7. Your rates should be valid at least for three months from the last date of opening of bid.
8. All legal proceedings, if necessity arises to institute may be any of the parties (Institute or Contractor/Supplier) shall have to be lodged in the courts situated at Jaipur and not elsewhere.
9. The institute is not bound to accept the lowest tender and may reject any tender or any part of the tender giving justification for such an action.
10. The rates must be quoted item-wise by giving Serial No. of our enquiry letter.
11. The quotations should preferably be sent duly typed.
12. (a) The Penalty Clause is as under :-

Should the tenderer fail to deliver the goods within the period specified in the tender form the Institute may, at its discretion, allow an extension in time subject to recovery from the tenderer as agreed liquidated damages, and not by way of penalty, a sum equal to the percentage of the value of stores which the tenderer has failed to supply for period of delay as stated below: -

(i)	Delay up to one month	1%
(ii)	Delay exceeding one month but not exceeding two month	2%
(iii)	Delay exceeding two month but not exceeding three month	5%
(iv)	Delay exceeding three month	5% for each month and part there of subject to maximum 10%

- (b) In case of failure to supply the goods within the prescribed time and in accordance with the specifications give in the Quotations, the institute shall be free to cancel the order and make purchases from the next higher tenderer or from the open market as the case may be. In that case the loss sustained by the institute shall be recovered from the defaulting supplier. The institute will be at liberty to recover the loss from the permanent earnest money/or any other pending claims of the supplier without prejudice to its general right to affect recovery from the supplier.
13. **EARNEST MONEY: A Demand Draft/Banker's Cheque or Bank Guarantee of Rs. 10,000/- from a Commercial bank only in the name of the Registrar, M.N.I.T. and payable at Jaipur may please be sent along with your tender as Earnest Money without which no tender shall be considered. Cheques are not accepted as earnest money amount. No interest is paid by us on the amount of earnest money. **Kindly attach the RTGS details with cancelled cheque along with the Earnest Money.****

14. While submitting the tender, the **GST Registration No., PAN & E-mail Address** is to be mentioned by the bidder positively. Failing this, their bid will be treated as non responsive. & Kindly provide
15. The Institute reserves the right to modify the quantity specified in this enquiry.
16. The quotation should be duly signed by an authorized person of the firm. The name and status of the signatory should be clearly to indicated, **UNSIGNED QUOTATIONS WILL BE LIABLE FOR REJECTION.**
17. **Performance Bank guarantee**
Successful Bidder has to Provide Performance security @ 10% of the equipment cost, valid for 03 Year + 60 days in the form of Bank's Guarantee from a commercial bank within 15 days from the date of issue our Purchase Order.
18. Specification Enclosed.

Deputy Registrar
(Store & Purchase)

Annexure - I

Specifications for Equipment: Smart city IoT devices				
Kit	Smart city IoT devices			
Item	Description of Requirement	Qty	Compliance	Remarks
Gas Sensors	Carbon Monoxide Detecting Sensor <i>Measurement Range 0 ~ 250 ppm</i>	2		
	CO2 Sensor	2		
	CH4 Gas Sensor	2		
	REES52 MQ2 Arduino Compatible Gas Sensor, <i>Methane, Butane, LPG, Smoke Sensor</i>	2		
	MQ135 Ammonia Gas Sensor Detector	2		
	Generic MQ-3 Alcohol Ethanol Sensor Gas Detector <i>Detection range 10 ~ 1000 PPM</i>	2		
	MQ136 Sensor for Hydrogen Sulfide	2		
	Air Pollutants Gas Sensor <i>Gases Detected (CH4, CO, CH-CH3,H2,CH3-CH2-OH)</i>	2		
	NO2 Gas Sensor <i>Measurement Range 0.05 ~ 5ppm</i>	2		
	Ccs811 Voc and Eco2 Gas Detection Sensor	2		
Connector	Jumper Wires M to M, m to f, f to f	700		
Buzzer	Grove – Buzzer <i>Sound Output ≥85dB</i>	4		
Dustbin	Counter Top Dustbin <i>3 Lt capacity</i>	1		
	Swing Lid dustbin <i>32 Lt. Capacity</i>	1		
Motor	Two units of Servo Motor Speed 48V: 023 Sec/ 60 deg 60V: 019 Sec/ 60 and Torque 48V: 32 Kg-cm 6v: 41 Kg-cm	2		
Power	Battery minimum 9 V according power requirement of kit	1		
Sensors for Smart Street Light	DTH-11 Digital Temperature And Humidity Sensor <i>Power Supply 3.3-5.5V DC, Output 4 pin single row, Measurement Range Humidity 20-90%RH, Temperature 0~50 °C, Resolution Humidity 1%RH Temperature 1 °C</i>	12		
	M127 Digital Thermal Sensor	12		
	Human Presence Sensor <i>Supply 3-5V DC, detection angle 35 °,Distance 2 ~ 10cm</i>	12		
Bulb for Smart Street Light	Hue 9.5W E27 Smart Bulb <i>White Ambience, Area Lighting Classification IP20, Material Synthetic, Colour White</i>	12		
	Smart Bright LED Light <i>Warm White, 240 volts, Color RGBb, Material Polycarbonate, Voltage 220 Volts, Luminous Flux 480 Lumens Wattage 7 Watts, Temperature 6500 Kelvin</i>	2		
Smart Home Devices	Coffee Maker <i>Black 0.6 liter capacity, Power: 700 watts; Operating Voltage: 230 volt, Brewing Time: 10 minutes</i>	1		
	Vacuum Cleaning Robot iRobot 900 Series Roomba 980	1		
	Smart door Yale Lock <i>Satin Nickel,Power 4 AA Alkaline Batteries, Remote Access</i>	1		
	Smart home assistant <i>Blueooth and Wi-Fi supports 802.11 a/b/g/n/ac (2.4 and 5 GHz) networks; Sound: 2.5" woofer and 0.8" tweeter; Power Requirement 5V</i>	2		
	Garnet Smart Light LED Bulb <i>220 volts</i>	2		
	Smart Hue Bulb <i>White, Area Lighting Classification IP20, Material Synthetic, Color White</i>	1		
Circuit Elements	ZigBee USB <i>speed of 2.4 GHz</i>	1		
	LED Light Bulb <i>Multicolor, 11 watts</i>	1		
	Window Door Sensor ZigBee Version Home APP Real Time	1		
	Control Smart Human Body Sensor	1		
	ZigBee Version Gateway Smart Home Kit Multifunctional Hub Remote Controller Centor Support Yeelight Aqara <i>Working temperature 0 °C ~ 40 °C, Working humidity 5% - 95%RH, (no</i>	1		

	<i>condensation), Input voltage 100-240V AC, 50Hz / 60Hz, Wireless protocol Wi-Fi 2.4ghz,</i>			
Sensors	Soil Humidity Hygrometer Moisture Detection Sensor Module	5		
	REES52 Arduino Uno R3	10		
	Raspberry Pi 3-MODB-1GB Motherboard	5		
	Raspberry PI 3 Model B+ Motherboard	3		
Bulb	Generic Grow Light	5		
	<i>Voltage AC85-265V, Wattage 10W, Working Temperature <50C, Lifespan >50000hours</i>			
Circuit Elements	Standard Recovery Rectifier Diode	1		
	<i>Current Rating 1 amps, Temperature Range -65-125 degrees celsius</i>			
	General Purpose Transistor 2N3904 NPN	1		
	Resistor	1		
	<i>221 Ohm</i>			
	Electric Dc Motor	1		
	<i>6V</i>			
Glue Gun	Transparent PVC Pipe Tube	1		
	<i>2M/ 6.56FT</i>			
	Breadboard	6		
	<i>With 400 points</i>			
	DC Submersible Pump	1		
	<i>9V tube length 50 cm</i>			
	<i>Generic Hot Glue Gun, Black with minimum 30 glue sticks</i>	1		
Antenna	SMA male antenna	6		
	<i>Vert2450-2.4 GHz to 5.8 GHz 3 dBi dual band, Frequency Range 2400-2500 MHz and 4900-5900 MHz, Gain 3 dBi, Horizontal Beam Width 360°, Impedance 50 Ohm, Maximum power 50W, Finish Matte Black, Connector SMA-Male, Operating Temperature -40° C to 60° C (-40° F to 140° F), Polarization Vertical, Flame Rating UL94HB, RoHS Compliant Yes</i>			
	ANT-5GMWP1-SMA	10		
	<i>Frequency Range CBRS 3.55-3.7 GHz C-Band 3.7-4.2 GHz Public Safety 4.94-4.99 GHz, VSWR CBRS 1.7 C-Band 2.2 Public Safety 1.4, Peak Gain CBRS 4.9 dBi C-Band 4.7 dBi Public Safety 3.2 dBi, Efficiency CBRS 82% C-Band 71% Public Safety 83%, Polarization Linear, Radiation Omnidirectional, Max Power 10W, Wavelength 1/2-wave, Electric Type Dipole, Impedance 50 ohm, Connection SMA Plug (male pin)</i>			
	VERT900 Vertical Antenna Dualband	3		
	<i>Frequency Range 824-960 MHz 1710-1990 MHz, Gain 3 dBi, Horizontal Beam Width 360°, Impedance 50 Ohm, Maximum power 50W</i>			
Log Periodic PCB Antenna	4			
<i>Frequency Range 850 MHz to 6.5 GHz, Gain 5-6 dBi, Log Periodic PCB Directional antenna</i>				
OctoClock-G CDA-2990 with GPSDO	1			
<i>Frequency 10 MHz, Power Range 0 dBm to 20 dBm (0.632 Vpk-pk to 6.325 Vpk-pk into 50 ohm), Coupling AC, Impedance 50 ohm, Input Voltage 6V to 15V DC, Input power 6W maximum, Voltage 1.4 Vpk-pk, Frequency accuracy 25ppb (with GPSDO), Active antenna voltage 5 V, Active antenna power 0.7 W, GPS frequency L1, C/A, 1574MHz, GPS Antenna Active or Passive, Sensitivity Acquisition -142 dBm, Sensitivity Tracking -158 dBm</i>				
Active GPS Antenna for USRP X310	2			
<i>Power 5-Volt</i>				
Adapter	Intel Ethernet Converged Network Adapter X520-DA2	2		
	<i>Port Configuration Dual, Data Rate per slot 10/1 GbE, Intel Virtualization Technology for Connectivity (VT-c) Yes, Speed & Slot width 5.0 GT/s, x8 Lane, Controller Intel 82599 10 Gigabit Ethernet Controller, System Interface Type PCIe v2.0(5.0 GT/s), Supported OS Ubuntu, Windows</i>			
Tool Kit	Smart Agriculture IoT Vertical Kit	1		
	<i>Meshlium 4G 868/900 AP, Plug & Sense! SA-PRO 868/900-PRO 5dBi, Plug & Sense! SA 868/900-PRO 5dBi, Temperature, Humidity and Pressure probe, Soil moisture 4,5 m probe, Soil moisture 1,5 probe, Soil/Water temperature (Pt-1000) probe, Soil temperature (DS18B20) Probe, Solar radiation probe, Leaf wetness probe, WS-3000 (anemometer + wind vane + pluviometer) probe, Outdoors USB cable, International adapter, External solar panel 7V - 500mA (power accessory for P&S!)</i>			

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