



**GOVERNMENT COLLEGE OF ENGINEERING
CHHATRAPATI SAMBHAJINAGAR**

(An Autonomous Institute of Govt. of Maharashtra)
Railway Station Road, Osmanpura, Chhatrapati Sambhajinagar.

“In Pursuit of Technical Excellence”

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No. GECSS/Robocon /2023-24/ 575

Date 12/02/2024

12 FEB 2024

To,
Notice Board/ Website

Subject :- Quotations for Robocon Electronics Components

Dear Sir, you are requested to send your competitive quotations for the supply of the following items subject to the following conditions.

Terms & Conditions -

1. Rates quoted should be FOR CHHATRAPATI SAMBHAJINAGAR or free delivery at the Institute inclusive of all lead and Lift.
 2. Detailed specifications of the articles you intend to supply should be given. If not according to the specification, laid down here under.
 3. The material should be supplied within (15) days from the date of order. List of material is given below.
 4. The earliest delivery period should be quoted if you cannot supply within the period mentioned above. Quotation should be in sealed cover and superscripted as **“Quotations for Robocon Electronics Components”**
- Due on : 20 - 02 - 2024, at 5 P.M.
5. Quotation should be valid for 31/03/2024
 6. Right to reject any or all quotations are reserved with the under signed.
 7. Rates quoted must be inclusive of All applicable Taxes.
 8. No advance shall be paid and No part payment shall be made.
 9. Detail Specification including make of material should be mentioned in Quotation. If the quoted Item/Peripheral is available with you in different brands/makes, the taxes should be mentioned separately brand wise/specification wise. If the Make/Brand/Manufacturer name is not mentioned in the quotation will be rejected without giving any information to the supplier.
 10. Manufacturer/Authorization/Distributorship Certificate from manufacturer is compulsory.
 11. Quotation not complying with the above conditions and incomplete once will not be considered.
 12. The supplier has to provide warranty certificate for 3 days without charge, against manufacturing defects.
 13. Supplier has to undertake repair replacement if any.

Sr. No.	Name of item with Description	Quantity
1	As per list attached Sr. No. 01 to Sr. No. 30	As per list

[Handwritten Signature]
Mech. Dept.
GCECS

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Faculty Advisor
Robocon 2024

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HOD
Electronics & Tel. Comm. Engg
Govt. College of Engg. Chha. Sambhajinagar

SR.NO.	NAME OF COMPONENT	DETAILS	QUANTITY
1	Cytron 20Amp 6V-30V DC Motor Driver (2 Channels)	Operating Voltage (VDC): 6 ~ 30, Input Logic Voltage(V): 1.8 V to 12 V, Peak Current (A): 60(10 sec), Continuous Current (A):20, Motor Output PWM Frequency(khz): 20	16
2	Bidirectional 50A 2-6s UBEC 5A 5V	Input Voltage:5V, Frequency Pwm: 1000-2000us,Peak Current (A): 50, Continuous Current : 5A	6
3	Original Arduino Mega 2560 ATmega2560 MCU Rev3 A000067	Manufacturer: Arduino Official Official Arduino Board with 3-Month brand Warranty Atmega 16U2 instead 8U2 as USB to serial converter Stronger RESET circuit , 5V operating voltage, 40mA DC current per I/O pin, 256KB flash memory of which 8KB used by bootloader, 8KB SRAM, 4KB EEPROM	2
4	Original Arduino Uno Rev3 A000066	Manufacturer: Arduino Officials Micro-controller : ATmega328P., Operating Voltage: 5V, Input Voltage (recommended) : 7-12V, Digital I/O Pins: 14 (of which 6 provide PWM output), Analog Input Pins: 6	2
5	Original Arduino Nano A000005	Manufacturer: Arduino Officials, Operating Voltage (logic level): 5V, 8 analog inputs ports: A0 ~ A7, 14 Digital input / output ports: TX, RX, D2 ~ D13, 1 pair of TTL level serial transceiver ports RX / TX, Using Atmel Atmega328P-AU MCU, There is a bootloader installed in it Standard 0.1" spacing DIP (breadboard friendly) Manual reset switch.	3
6	ADK USB Host Shield compatible with Arduino	Works with standard (dual 5/3.3V) and 3.3V-only (for example, Pro Arduino) boards. Complies with USB Specification Revision 2.0 (Full-Speed 12Mbps Peripheral, Full-/Low-Speed 12Mbps/1.5Mbps Host) Supports HID devices, such as keyboards, mice, joysticks, etc. Compatible with Mass storage devices, such as USB sticks, memory card readers, external hard drives (FAT32 Type File System – Mega Arduino only).	2
7	Arduino 9 axis motion shield	The Arduino 9 Axes Motion Shield is based on the BNO055 absolute orientation sensor from Bosch Sensortec GmbH which integrates a triaxial 14-bit accelerometer, a triaxial 16-bit gyroscope with a range of ±2000 degrees per second and a triaxial geomagnetic sensor with a 32-bit microcontroller running the BSX3.0 FusionLib software.	2

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8	1 Channel Relay Module, 30A with Optocoupler, Isolation 5V Supports, High and Low Triger	Supply voltage(V): DC 5V Quiescent Current (mA) :5mA Maximum Operating Current:190mA Trigger Mode: High and low-level trigger Load Voltage: DC 30V / AC250 Load Current: 30A Relay Life: more than 100,000 times	2
9	4 Channel Isolated 5V 10A Relay Module opto coupler For Arduino PIC AVR DSP ARM	No. of Channel: 4 Trigger Voltage: 5VDC Triode drive, increasing relay coil High impedance controller pin Pull-down circuit for the avoidance of malfunction Power supply indicator and Control indicator lamp Power supply and relay instructions, lit, the disconnect is off; The input signal, signal, common Terminal and start conducting	3
10	5V 2 Channel Relay Module	Trigger Current (mA): 20 Switching Voltage (VAC): 250@10A Switching Voltage (VDC): 30@10A Operating Temperature Range (°C):-40 to 85 Opt. Relative Humidity(RH): 20% ~ 85% Storage condition (°C): - 65 to 125	2
11	Amass XT60 Male Connectors – 2 pcs		25
12	Amass XT60 Female Connectors – 2 pcs		13
13	Amass MT30 3 Pole Motor/ESC Connector Set Male+Female Pair (1 Set)		10
14	Mini MP1584 DC-DC 3A Adjustable Buck Module	Input Voltage: 4.5V – 28V, Output Voltage: 0.8V – 20V, Output Voltage Adjustment: On-board potentiometer, Output Current: 1.8A (typical), 3.0A (max)	10
15	XL4015 5A DC-DC Step Down Adjustable Power Supply Buck Module LED with Heatsink	Input voltage range: 4V-38V DC, Output voltage range: 1.25V-36V DC adjustable, Output current: 0-5A, Output power: 75W, High efficiency up to 96%	10
16	Hobbywing Skywalker- 80A UBEC	Output: Continuous 80A, Burst 100A up to 10seconds, Input Voltage: 3-6S Lipo, 5-18 cells NiMH, BEC: 5A / 5V Switch mode BEC, Refresh rate of the throttle signal: 50Hz to 432Hz, Max Speed: 21000rpm for 2 Poles BLM, 70000rpm for 6 poles BLM, 35000rpm for 12 poles BLM.	2
17	TowerPro MG995 Metal Gear Servo Motor (360° Continuous Rotation)	Operating Speed @6.6V: 0.16sec/60° Stall Torque @ 4.8V (Kg-Cm): 9.40 Stall Torque @6.6V (Kg-Cm): 11 Operating Temperature Range (°C):-30 to 60 Dead Band Width (μs): 4 Gear Type: Metal Rotational Degree: 360° Servo Plug: JR Cable Length (cm): 30	8

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		Length (mm):40.5 Width (mm): 20 Height (mm) 44 Shipping Weight: 0.059 kg	
18	TowerPro SG92R Mini Servo Motor (180° Rotation)	Model: SG92R, Weight: 9 gm, Operating voltage: 3.0V~ 7.2V, Servo Plug: JR, Stall torque @4.8V : 2.5kg-cm	12
19	Lipo Voltage Checker 1S-8S with Buzzer Alarm	Input: 1S-8S Battery, Battery type: Lipo/LiFe/Li-ion/LiMn It has a Buzzer Alarm for low voltage indication, Useful for measuring each cell voltage, Cell Voltage Display Range: 0.5v-4.5v, Total Voltage Display Range: 3.7-36v, Alarm set values: Off or 2.7-3.8v	10
20	Soldron High Quality 35W/230V Soldering Iron	Brand: Soldron Rated power : 35 Watts , Operating Voltage: 110 to 230V AC, Cable length: 1.5 Meter , Max Temperature: 420°C	4
21	Copper Clad for PCB making Single Sided	30cmX30cm, Single Sided, Glass fiber	10
22	Copper Clad for PCB making Double Sided	30cmX30cm, Double Sided, Glass fiber	5
23	PCB Prototype Board Single-Sided (Zero PCB)	15 x 20 cm, 2.54mm Hole Pitch	10
24	EasyMech 152mm Double Aluminium Omni Wheel (BEARING TYPE ROLLER)	Model : EasyMech152, Body Material: Aluminium, Diameter (mm):152, Total Body Width (mm): 39, Load Capacity(Kg/Wheel): 35 Axial OD (mm): 22, Pitch Circle Diameter (PCD) mm: 47.5, Number of Plates: 6, Number of Rollers per Wheel : 28, Roller Type: Bearing, Roller Material: Nitrile Rubber, Roller Diameter (mm) : 19 mm, Roller Width (mm): 18, Weight (gm): 800 Color: silver	4
25	A set of EasyMech 152mm Aluminium Mecanum wheels (Bearing type rollers)-(4 pieces)	Roller Type: Bearing, Body Material: Aluminium, Diameter of Roller (mm): 19, Internal Diameter(ID)(mm): 22, Length of Roller (mm): 38 Load Capacity(Kg/Wheel): 15 ~ 20, Net weight (gm): 530, Per Wheel, Number of Plates: 2 Number of Rollers per Wheel : 15, Outer Diameter: Nylon+ TPR, Spacer material: Nylon Wheel Width (mm): 45, Plate Thickness (mm) : 2.5, Diameter of Holes: 5 mm (M5 bolt compatible). Holes for Mounting: PCD 47.5 mm. Nut Type: Hex, Nyloc Nut.	2

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26	eSun PLA+ 1.75mm 3D Printing Filament 1kg-Black	Consistently High Quality, Made from great, high-performance materials Ready to print on any open source desktop or industrial printer Deliver exceptional performance 100% bio-degradable and FDA food safety approved 10 times stronger than regular PLA on the market	2
27	STMICROELECTRONICS Development Board, Nucleo-64, STM32F446RE MCU, On-Board Debugger, Arduino, ST Zio&Morpho Compatible	Model: Nucleo-64, STM32F446RE MCU, Product: STMICROELECTRONICS Development Board, Flexible power-supply options: ST-LINK USB VBUS or external sources The STM32 Nucleo-64 board does not require any separate probe as it integrates the ST-LINK debugger/programmer Operating Supply Voltage: 3.3 V, 5 V, 7 V to 12 V, Interface Type: USB.	1
28	Cable For Arduino UNO/MEGA (USB A to B) 3.11 feet	USB Type: Type-A to Type-B , Length: 3.11 feet (120 cm) , Gold Plated Connector , Fully compatible with the PC, Molded strain relief and PVC over molding to ensure a lifetime of error-free data transmissions.	5
29	USB to Micro USB Cable wire 1M for NodeMCU	Cable length: 1 Meter , The cable is made of durable and high-quality material Enable you to easily transfer all your files from or to cellphone	5
30	SkyRC IMAX B6AC V2 Professional Balance Charger/Discharger	(Original) Input Voltage (V AC): 110 ~ 240 DC Input Voltage Range (V): 12 Output Power(Watt):50W. Charge Current Range (A):0.1 ~ 5 Maximum Discharge Power (W):5 Discharge Current Range (A):0.1 ~ 1.0 Drain Current for Balancing Li-Po's (mA/Cell): 300 Li-ion/Po cell count: 1 ~ 6 NiCd/NiMH cell count: 1 ~ 15 Cells Pb battery voltage: 2 ~ 20	1

NOTE:

- 1) The Supplier must give Guarantee of the component, material, and it's Working.
- 2) The delivery of the Component we required as per mentioned specification.

P. Hany
HOD
Mechanical
GCOECS.

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