| * | , , | | | | | | | | |
|---|-------------|------------|-------------|--|--|--|--|--|--|
| Description | Qty | Unit price | Total price | | | | | | |
| Onboard Computer | | | | | | | | | |
| Raspberry Pi 4: 8GB kit | 1 | 8,600.00 | 8,600.00 | | | | | | |
| Raspberry Pi 4: 4GB | 1 | 4,990.00 | 4,990.00 | | | | | | |
| Raspberry Pi 4: Case and Fan | 2 | 449.00 | 898.00 | | | | | | |
| SanDisk 32GB Class 10 Micro SDHC Memory Card | 1 | 590.00 | 590.00 | | | | | | |
| HDMI to USB Video Capture | 1 | 890.00 | 890.00 | | | | | | |
| PL2303 USB to TTL module | 2 | 109.00 | 218.00 | | | | | | |
| USB To TTL Serial Cable Debugger | 2 | 149.00 | 298.00 | | | | | | |
| RTC Real Time Clock DS1307 | 2 | 99.00 | 198.00 | | | | | | |
| GPIO Shield Expansion board for Raspberry Pi | 1 | 249.00 | 249.00 | | | | | | |
| 4 Ports USB Hub | 1 | 444.00 | 444.00 | | | | | | |
| | Subtotal | 17,375.00 | | | | | | | |
| | | | | | | | | | |
| Onboard I | Microcontr | oller | | | | | | | |
| Arduino Nano | 2 | 419.00 | 838.00 | | | | | | |
| Arduino Uno | 2 | 499.00 | 998.00 | | | | | | |
| Arduino Uno Cable (USB A to B) | 2 | 34.00 | 68.00 | | | | | | |
| Arduino Lilypad | 4 | 319.00 | 1,276.00 | | | | | | |
| ESP8266 NodeMCU | 1 | 339.00 | 339.00 | | | | | | |
| ESP8266 NodeMCU Cable (USB A to micro B) | 1 | 69.00 | 69.00 | | | | | | |
| Micro SD Card Reader | 2 | 99.00 | 198.00 | | | | | | |
| | Subtotal | 3,786.00 | | | | | | | |
| | | | | | | | | | |
| Sensor | s & Display | ys | | | | | | | |
| Dashboard TFT LCD (5') with dashboard camera | 1 | 1,499.00 | 1,499.00 | | | | | | |
| 3.5 mm Stereo Male to 3 RCA Male Audio Video AV Cable | 1 | 234.00 | 234.00 | | | | | | |
| Video and Audio Capturing Device | 1 | 499.00 | 499.00 | | | | | | |
| Nokia 5110 84x48 Graphic LCD | 1 | 266.00 | 266.00 | | | | | | |
| 16x2 Blue Alphanumeric LCD | 1 | 179.00 | 179.00 | | | | | | |
| Numeric 7 - Segment Display | 1 | 130.00 | 130.00 | | | | | | |
| 7-Segment Driver IC | 1 | 55.00 | 55.00 | | | | | | |
| 74HC595 8 Bit Serial-in Serial or Parallel-out Shift Register | 4 | 29.00 | 116.00 | | | | | | |
| NEO-6M GPS Module with Antenna | 1 | 459.00 | 459.00 | | | | | | |
| Voltage Detector Sensor 0-25V | 2 | 109.00 | 218.00 | | | | | | |
| HMC5883L Magnetometer Compass Module | 1 | 239.00 | 239.00 | | | | | | |
| 433MHZ LORA SX1278 Long Range Rf Wireless Module | 2 | 449.00 | 898.00 | | | | | | |
| MCP2515 CAN Module | 2 | 385.00 | 770.00 | | | | | | |
| | | | | | | | | | |

| Description | Qty | Unit price | Total price |
|--|----------|------------|-------------|
| MPU-6050 3-Axis Accelerometer and Gyroscope Sensor | 4 | 139.00 | 556.00 |
| Reed Switches | 2 | 150.00 | 300.00 |
| Magnetic Reed Switch Glass Ampule | 5 | 39.00 | 195.00 |
| Potentiometer | 3 | 260.00 | 780.00 |
| Wired Temperature Sensor | 2 | 95.00 | 190.00 |
| IR Temperature Sensor | 2 | 999.00 | 1,998.00 |
| MPXV7002DP Air Speed Sensor And Pitot Tube | 1 | 3,890.00 | 3,890.00 |
| | Subtotal | 13,471.00 | |

| Su | pplies & misc | | |
|--|---------------|--------|--------|
| Black Connecting Wire 24 AWG | 1 | 249.00 | 249.00 |
| Red Connecting Wire 24 AWG | 1 | 249.00 | 249.00 |
| Male to Female Jumper Cables | 2 | 55.00 | 110.00 |
| Male to Male Jumper Cables | 2 | 65.00 | 130.00 |
| Female to Female Jumper Cables | 2 | 55.00 | 110.00 |
| Breadboard | 2 | 78.00 | 156.00 |
| mini Breadboard | 4 | 50.00 | 200.00 |
| Wire Nipper / Angle Cutter | 1 | 179.00 | 179.00 |
| PYE Wire Stripper | 1 | 69.00 | 69.00 |
| Mastech Multimeter | 1 | 819.00 | 819.00 |
| Hot Glue Gun | 1 | 249.00 | 249.00 |
| Hot Melt Glue Sticks (11 mm) | 5 | 118.00 | 590.00 |
| Heat Shrink Tubing | 1 | 429.00 | 429.00 |
| Buck Converter 12v to 5v (300W) | 1 | 450.00 | 450.00 |
| DC to DC Buck Regulator (75W) | 2 | 169.00 | 338.00 |
| Soldering Iron Soldoron 25Watt | 1 | 399.00 | 399.00 |
| Soldering Iron Stand | 1 | 99.00 | 99.00 |
| Desoldering Copper Wick | 1 | 29.00 | 29.00 |
| Soldering Flux Paste | 1 | 15.00 | 15.00 |
| Soldering Iron Bit 25Watt Siron | 1 | 79.00 | 79.00 |
| Soldering Wire Tin-Lead Rosin Core | 1 | 99.00 | 99.00 |
| Soldering Iron Tip Cleaning Sponge | 1 | 49.00 | 49.00 |
| PYE Screw Driver / Tester combo (8 different bits) | 1 | 259.00 | 259.00 |
| 160mm Steel Tweezer | 1 | 39.00 | 39.00 |
| 12 mm Kapton Tape for heat resistance | 1 | 199.00 | 199.00 |
| 12mm Normally Open Push Button Switch | 4 | 29.00 | 116.00 |
| Resister Pack (150 pcs) assorted | 2 | 79.00 | 158.00 |

| * | | | |
|--|----------|------------|-------------|
| Description | Qty | Unit price | Total price |
| 3 Pin Screw Terminal Green | 5 | 9.00 | 45.00 |
| 2 Pin Screw Terminal Green | 5 | 6.00 | 30.00 |
| PCB Mount USB A Socket | 2 | 15.00 | 30.00 |
| 5mm Transparent Red LED | 10 | 2.00 | 20.00 |
| 5mm Transparent Yellow LED | 10 | 2.00 | 20.00 |
| 5mm Transparent Green LED | 10 | 2.00 | 20.00 |
| 5mm Transparent Blue LED | 10 | 2.00 | 20.00 |
| 5mm Diffused Red LED | 10 | 2.00 | 20.00 |
| 5mm Diffused Yellow LED | 10 | 2.00 | 20.00 |
| 5mm Diffused Green LED | 10 | 2.00 | 20.00 |
| Milton 2.5 Inch 3 Watt speaker | 2 | 49.00 | 98.00 |
| 20 MM SPDT 3 pin Switch | 4 | 17.00 | 68.00 |
| 10mm Piezo Buzzer | 3 | 25.00 | 75.00 |
| 10k Variable Resistor | 5 | 8.00 | 40.00 |
| 6x6mm Tactile Button 4-pin | 10 | 3.00 | 30.00 |
| Push Button On/Off Switch | 10 | 11.00 | 110.00 |
| LM324 Op Amp | 2 | 19.00 | 38.00 |
| 30mm Crocodile Clip | 10 | 20.00 | 200.00 |
| 40 pin Right Angle Male Headers | 4 | 15.00 | 60.00 |
| 40 pin Female Headers | 5 | 9.00 | 45.00 |
| 40 pin Male Headers | 5 | 7.00 | 35.00 |
| 4x4 Membrane Keypad | 2 | 79.00 | 158.00 |
| 1 Channel 5V Relay | 4 | 69.00 | 276.00 |
| Dual Axis Joystick | 1 | 99.00 | 99.00 |
| 6x4 Inch Perfboard Circuit Board | 5 | 59.00 | 295.00 |
| 3x2 Inch Perfboard Circuit Board | 5 | 15.00 | 75.00 |
| Rotary Encoder Switch | 3 | 109.00 | 327.00 |
| Cable Labels Stickers | 1 | 290.00 | 290.00 |
| Locking Cable Marker (Cable Protector) | 1 | 299.00 | 299.00 |
| Assorted 4, 6, 8, 10, 12 Inch Nylon Cable Ties Zip | 1 | 180.00 | 180.00 |
| 4 Pole Wire Connector Terminal | 10 | 25.00 | 250.00 |
| 3 Pole Wire Connector Terminal | 10 | 19.00 | 190.00 |
| | Subtotal | 9,350.00 | |
| | | | |

Total

This is an approximate estimation, pending to more additions / deletions.

Notes:

43,982.00

Description Qty Unit price Total price

Ordering Website:

robu.in/

amazon.in/

| Description | Qty | Unit price | Total price |
|---|----------|------------|-------------|
| Sensors & Displa | | | |
| Dashboard TFT LCD (5') with dashboard camera | 1 | 1,499.00 | 1,499.00 |
| 3.5 mm Stereo Male to 3 RCA Male Audio Video AV Cable | 1 | 234.00 | 234.00 |
| Video and Audio Capturing Device | 1 | 499.00 | 499.00 |
| Nokia 5110 84x48 Graphic LCD | 1 | 266.00 | 266.00 |
| 16x2 Blue Alphanumeric LCD | 1 | 179.00 | 179.00 |
| Numeric 7 - Segment Display | 1 | 130.00 | 130.00 |
| 7-Segment Driver IC | 1 | 55.00 | 55.00 |
| 74HC595 8 Bit Serial-in Serial or Parallel-out Shift Register | 4 | 29.00 | 116.00 |
| NEO-6M GPS Module with Antenna | 1 | 459.00 | 459.00 |
| Voltage Detector Sensor 0-25V | 2 | 109.00 | 218.00 |
| HMC5883L Magnetometer Compass Module | 1 | 239.00 | 239.00 |
| 433MHZ LORA SX1278 Long Range Rf Wireless Module | 2 | 449.00 | 898.00 |
| MCP2515 CAN Module | 2 | 385.00 | 770.00 |
| MPU-6050 3-Axis Accelerometer and Gyroscope Sensor | 4 | 139.00 | 556.00 |
| Reed Switches | 2 | 150.00 | 300.00 |
| Magnetic Reed Switch Glass Ampule | 5 | 39.00 | 195.00 |
| Potentiometer | 3 | 260.00 | 780.00 |
| Wired Temperature Sensor | 2 | 95.00 | 190.00 |
| IR Temperature Sensor | 2 | 999.00 | 1,998.00 |
| | Subtotal | 9,581.00 | |
| | | | |

Total

This is an approximate estimation, pending to more Notes: additions / deletions.

9,581.00

Ordering Website:

robu.in/

amazon.in/

| Description | Qty | Unit price | Total price |
|--|-----|------------|-------------|
| Supplies & mis | sc | | |
| Black Connecting Wire 24 AWG | 1 | 249.00 | 249.00 |
| Red Connecting Wire 24 AWG | 1 | 249.00 | 249.00 |
| Male to Female Jumper Cables | 2 | 55.00 | 110.00 |
| Male to Male Jumper Cables | 2 | 65.00 | 130.00 |
| Female to Female Jumper Cables | 2 | 55.00 | 110.00 |
| Breadboard | 2 | 78.00 | 156.00 |
| mini Breadboard | 4 | 50.00 | 200.00 |
| Wire Nipper / Angle Cutter | 1 | 179.00 | 179.00 |
| PYE Wire Stripper | 1 | 69.00 | 69.00 |
| Mastech Multimeter | 1 | 819.00 | 819.00 |
| Hot Glue Gun | 1 | 249.00 | 249.00 |
| Hot Melt Glue Sticks (11 mm) | 5 | 118.00 | 590.00 |
| Heat Shrink Tubing | 1 | 429.00 | 429.00 |
| Buck Converter 12v to 5v (300W) | 1 | 450.00 | 450.00 |
| DC to DC Buck Regulator (75W) | 2 | 169.00 | 338.00 |
| Soldering Iron Soldoron 25Watt | 1 | 399.00 | 399.00 |
| Soldering Iron Stand | 1 | 99.00 | 99.00 |
| Desoldering Copper Wick | 1 | 29.00 | 29.00 |
| Soldering Flux Paste | 1 | 15.00 | 15.00 |
| Soldering Iron Bit 25Watt Siron | 1 | 79.00 | 79.00 |
| Soldering Wire Tin-Lead Rosin Core | 1 | 99.00 | 99.00 |
| Soldering Iron Tip Cleaning Sponge | 1 | 49.00 | 49.00 |
| PYE Screw Driver / Tester combo (8 different bits) | 1 | 259.00 | 259.00 |
| 160mm Steel Tweezer | 1 | 39.00 | 39.00 |
| 12 mm Kapton Tape for heat resistance | 1 | 199.00 | 199.00 |
| 12mm Normally Open Push Button Switch | 4 | 29.00 | 116.00 |
| Resister Pack (150 pcs) assorted | 2 | 79.00 | 158.00 |
| 3 Pin Screw Terminal Green | 5 | 9.00 | 45.00 |
| 2 Pin Screw Terminal Green | 5 | 6.00 | 30.00 |
| PCB Mount USB A Socket | 2 | 15.00 | 30.00 |
| 5mm Transparent Red LED | 10 | 2.00 | 20.00 |
| 5mm Transparent Yellow LED | 10 | 2.00 | 20.00 |
| 5mm Transparent Green LED | 10 | 2.00 | 20.00 |

| Description | Qty | Unit price | Total price |
|--|----------|------------|-------------|
| 5mm Transparent Blue LED | 10 | 2.00 | 20.00 |
| 5mm Diffused Red LED | 10 | 2.00 | 20.00 |
| 5mm Diffused Yellow LED | 10 | 2.00 | 20.00 |
| 5mm Diffused Green LED | 10 | 2.00 | 20.00 |
| Milton 2.5 Inch 3 Watt speaker | 2 | 49.00 | 98.00 |
| 20 MM SPDT 3 pin Switch | 4 | 17.00 | 68.00 |
| 10mm Piezo Buzzer | 3 | 25.00 | 75.00 |
| 10k Variable Resistor | 5 | 8.00 | 40.00 |
| 6x6mm Tactile Button 4-pin | 10 | 3.00 | 30.00 |
| Push Button On/Off Switch | 10 | 11.00 | 110.00 |
| LM324 Op Amp | 2 | 19.00 | 38.00 |
| 30mm Crocodile Clip | 10 | 20.00 | 200.00 |
| 40 pin Right Angle Male Headers | 4 | 15.00 | 60.00 |
| 40 pin Female Headers | 5 | 9.00 | 45.00 |
| 40 pin Male Headers | 5 | 7.00 | 35.00 |
| 4x4 Membrane Keypad | 2 | 79.00 | 158.00 |
| 1 Channel 5V Relay | 4 | 69.00 | 276.00 |
| Dual Axis Joystick | 1 | 99.00 | 99.00 |
| 6x4 Inch Perfboard Circuit Board | 5 | 59.00 | 295.00 |
| 3x2 Inch Perfboard Circuit Board | 5 | 15.00 | 75.00 |
| Rotary Encoder Switch | 3 | 109.00 | 327.00 |
| Cable Labels Stickers | 1 | 290.00 | 290.00 |
| Locking Cable Marker (Cable Protector) | 1 | 299.00 | 299.00 |
| Assorted 4, 6, 8, 10, 12 Inch Nylon Cable Ties Zip | 1 | 180.00 | 180.00 |
| 4 Pole Wire Connector Terminal | 10 | 25.00 | 250.00 |
| 3 Pole Wire Connector Terminal | 10 | 19.00 | 190.00 |
| | Subtotal | 9,350.00 | |
| | | | |

Total

This is an approximate estimation, pending to more Notes: additions / deletions.

9,350.00

Ordering Website:

robu.in/

amazon.in/

Description Qty Unit price Total price

| Description | Qty | Unit price | Total price | | | | |
|--|-------------|------------|-------------|--|--|--|--|
| Onboard Computer | | | | | | | |
| HDMI to USB Video Capture | 1 | 890.00 | 890.00 | | | | |
| PL2303 USB to TTL module | 2 | 109.00 | 218.00 | | | | |
| USB To TTL Serial Cable Debugger | 2 | 149.00 | 298.00 | | | | |
| RTC Real Time Clock DS1307 | 2 | 99.00 | 198.00 | | | | |
| GPIO Shield Expansion board for Raspberry Pi | 1 | 249.00 | 249.00 | | | | |
| 4 Ports USB Hub | 1 | 444.00 | 444.00 | | | | |
| | Subtotal | 2,297.00 | | | | | |
| | | | | | | | |
| Onboard Micro | ocontroller | | | | | | |
| Arduino Nano | 2 | 419.00 | 838.00 | | | | |
| Arduino Uno | 2 | 499.00 | 998.00 | | | | |
| Arduino Uno Cable (USB A to B) | 2 | 34.00 | 68.00 | | | | |
| Arduino Lilypad | 4 | 319.00 | 1,276.00 | | | | |
| ESP8266 NodeMCU | 1 | 339.00 | 339.00 | | | | |
| ESP8266 NodeMCU Cable (USB A to micro B) | 1 | 69.00 | 69.00 | | | | |
| Micro SD Card Reader | 2 | 99.00 | 198.00 | | | | |
| | Subtotal | 3,786.00 | | | | | |
| | | | | | | | |
| Sensors & | Displays | | | | | | |
| MPXV7002DP Air Speed Sensor And Pitot Tube | 1 | 3,890.00 | 3,890.00 | | | | |
| | Subtotal | 3,890.00 | | | | | |
| | | Total | | | | | |

This is an approximate estimation, pending to more Notes: additions / deletions.

9,973.00

Ordering Website:

robu.in/

amazon.in/

| Description | Qty | Unit price | Total price |
|--|-----|------------|-------------|
| Onboard Compu | ter | | |
| Raspberry Pi 4: 8GB kit | 1 | 8,600.00 | 8,600.00 |
| SanDisk 32GB Class 10 Micro SDHC Memory Card | 1 | 590.00 | 590.00 |

Total

This is an approximate estimation, pending to more Notes:

additions / deletions.

9,190.00

Ordering Website:

robu.in/

amazon.in/

| Description | Qty | Unit price | Total price |
|------------------------------|-----|------------|-------------|
| Onboard Compu | ter | | |
| Raspberry Pi 4: 4GB | 1 | 4,990.00 | 4,990.00 |
| Raspberry Pi 4: Case and Fan | 2 | 449.00 | 898.00 |

Total

This is an approximate estimation, pending to more additions / deletions.

5,888.00

Ordering Website:

Notes:

robu.in/

amazon.in/

| DA | Q D | III OI | Male | mais (combine | л <i>)</i> |
|---|-----|------------------|----------------------|---|--|
| Description | Qty | Unit price | Total price | Links | Utility |
| | | | | Computer | |
| Raspberry Pi 4: 8GB kit | 1 | 8,600.00 | | https://www.amazon.in/India-Raspberry-Charger-H | |
| Raspberry Pi 4: 4GB | 1 | 4,990.00 | | https://robu.in/product/raspberry-pi-4-model-b-with | |
| Raspberry Pi 4: Case and Fan | 2 | 449.00 | | https://www.amazon.in/India-Raspberry-Option-Mo | • |
| SanDisk 32GB Class 10 Micro SDHC Memory Card | 1 | 590.00 | | https://www.amazon.in/SanDisk-Class-Memory-Ad | • |
| HDMI to USB Video Capture | 1 | 890.00 | 890.00 | https://www.amazon.in/Tobo-Levoty-Game-Capture | Peripheral for Onboard Computer |
| PL2303 USB to TTL module | 2 | 109.00 | 218.00 | https://www.sparkpcb.com/development/communic | Peripheral for Onboard Computer |
| JSB To TTL Serial Cable Debugger | 2 | 149.00 | 298.00 | https://robu.in/product/pl2303-ta-download-cable- | Peripheral for Onboard Computer |
| RTC Real Time Clock DS1307 | 2 | 99.00 | 198.00 | https://robu.in/product/rtc-ds1307-i2c-real-time-cloo | Peripheral for Onboard Computer |
| GPIO Shield Expansion board for Raspberry Pi | 1 | 249.00 | 249.00 | https://www.sparkpcb.com/development/gpio-shield | Peripheral for Onboard Computer |
| Ports USB Hub | 1 | 444.00 | 444.00 | https://www.amazon.in/Zebronics-100HB-High-Spe | Peripheral for Onboard Computer |
| | | | Subtotal | 17,375.00 | |
| | | | Onboard Mi | crocontroller | |
| rduino Nano | 2 | 419.00 | | https://robu.in/product/arduino-nano-v3-0-ch340-c | Basic portable Microcontroller for analog signal |
| Arduino Uno | 2 | 499.00 | 998.00 | https://robu.in/product/arduino-uno-r3-ch340g-atm | Basic Microcontroller for analog signals |
| Arduino Uno Cable (USB A to B) | 2 | 34.00 | 68.00 | https://robu.in/product/cable-for-arduino-unomega | Peripheral for Onboard microcontroller |
| Arduino Lilypad | 4 | 319.00 | 1,276.00 | https://www.sparkpcb.com/development/arduino-lily | Basic portable Microcontroller for analog signal |
| ESP8266 NodeMCU | 1 | 339.00 | | https://robu.in/product/nodemcu-esp8266-v3-lua-c | |
| ESP8266 NodeMCU Cable (USB A to micro B) | 1 | 69.00 | | https://robu.in/product/micro-usb-a-to-micro-b-cab | |
| Micro SD Card Reader | 2 | 99.00 | | https://www.sparkpcb.com/development/micro-sd | • |
| | | 99.00 | Subtotal | 3,786.00 | |
| | | | | | |
| Cookbased TET LCD (F) with deabhased comors | | | | & Displays | Dashkaard Dianlay J. Camera |
| ashboard TFT LCD (5') with dashboard camera | 1 | 1,499.00 | | https://www.amazon.in/Carzex-Dashboard-Screen- | • • |
| 5.5 mm Stereo Male to 3 RCA Male Audio Video AV Cable | | 234.00 | | https://www.amazon.in/Ekaaz-Stereo-Audio-Camco | |
| ideo and Audio Capturing Device Directly from TV | 1 | 499.00 | | https://www.amazon.in/Easycap-Video-Capturing-E | |
| lokia 5110 84x48 Graphic LCD | 1 | 266.00 | | https://www.sparkpcb.com/electronics/nokia-5110-8 | |
| 6x2 Blue Alphanumeric LCD | 1 | 179.00 | | https://www.sparkpcb.com/electronics/16x2-line-blu | |
| lumeric 7 - Segment Display | 1 | 130.00 | | https://www.amazon.in/Segment-Display-Common | : : |
| -Segment Driver IC | 1 | 55.00 | | https://www.amazon.in/CD4511-Segment-Latch-De | |
| 74HC595 8 Bit Serial-in Serial or Parallel-out Shift Registe | | 29.00 | | https://www.sparkpcb.com/electronics/74hc595-8-b | |
| IEO-6M GPS Module with Antenna | 1 | 459.00 | | https://www.sparkpcb.com/development/neo-6m-gp | |
| /oltage Detector Sensor 0-25V | 2 | 109.00 239.00 | | https://www.sparkpcb.com/sensors/voltage-detection/ https://www.sparkpcb.com/sensors/hmc5883l-triple | |
| HMC5883L Magnetometer Compass Module | 2 | 449.00 | | https://robu.in/product/ai-thinker-lora-ra-01-rf-transc | • |
| I33MHZ LORA SX1278 Long Range Rf Wireless Module MCP2515 CAN Module | | | | https://robu.in/product/ai-tninker-iora-ra-u1-ri-transc | |
| | 2 | 385.00 | | https://www.sparkpcb.com/sensors/mpu6050-gyros | = |
| MPU-6050 3-Axis Accelerometer and Gyroscope Sensor Reed Switches | 2 | 139.00 | | https://www.amazon.in/Electronicspices-Pack-Min | |
| | 5 | 150.00 | | | · |
| Magnetic Reed Switch Glass Ampule | | 39.00 | | https://www.sparkpcb.com/sensors/magnetic-read- | |
| Potentiometer | 3 | 260.00 | | https://www.amazon.in/EPICTAC-Potentiometer-Lin | |
| Vired Temperature Sensor | 2 | 95.00 | | https://robu.in/product/ds18b20-water-proof-temper | |
| R Temperature Sensor | 2 | 999.00 | | https://robu.in/product/mlx90614-esf-non-contact-h | |
| MPXV7002DP Air Speed Sensor And Pitot Tube | 1 | 3,890.00 | 3,890.00 Subtotal | https://robu.in/product/air-speed-sensor-and-pitot-tr | Pitot Tube |
| | | | oubtota. | 13,471.00 | |
| | | | • • | s & misc | |
| lack Connecting Wire 24 AWG | 1 | 249.00 | | https://robu.in/product/high-quality-24awg-silicone- | |
| ted Connecting Wire 24 AWG | 1 | 249.00 | | https://robu.in/product/24awg-silicone-wire/ | Supplies |
| Male to Female Jumper Cables | 2 | 55.00 | | https://robu.in/product/male-to-female-jumper-wires | |
| Male to Male Jumper Cables | 2 | 65.00 | | https://robu.in/product/male-to-male-jumper-wires-4 | |
| emale to Female Jumper Cables | 2 | 55.00 | 110.00 | https://robu.in/product/20cm-dupont-wire-color-jum | Supplies |
| readboard | 2 | 78.00 | 156.00 | https://robu.in/product/breadboard-840-tie-points-se | Supplies |
| nini Breadboard | 4 | 50.00 | 200.00 | https://robu.in/product/170-pts-mini-breadboard-syl | Supplies |
| Vire Nipper / Angle Cutter | 1 | 179.00 | 179.00 | https://www.sparkpcb.com/tools/stripper-cutter-plie | Appliance |
| YE Wire Stripper | 1 | 69.00 | 69.00 | https://www.sparkpcb.com/tools/stripper-cutter-plie | Appliance |
| Mastech Multimeter | 1 | 819.00 | 819.00 | https://www.sparkpcb.com/test-equipments/multime | Instrument |
| lot Glue Gun | 1 | 249.00 | 249.00 | https://robu.in/product/standard-temperature-corde | Appliance |
| lot Melt Glue Sticks (11 mm) | 5 | 118.00 | | https://www.amazon.in/Glun-11MM-Transparent-St | |
| Heat Shrink Tubing | 1 | 429.00 | | https://robu.in/product/colorful-heat-shrink-tubing-h | |
| Buck Converter 12v to 5v (300W) | 1 | 450.00 | | https://www.amazon.in/xcluma-Converter-1-2-35V- | |
| OC to DC Buck Regulator (75W) | 2 | 169.00 | | https://www.sparkpcb.com/development/xl4015-5a- | |
| oldering Iron Soldoron 25Watt | 1 | 399.00 | | https://www.sparkpcb.com/tools/soldering-iron-stati | |
| Coldering Iron Stand | 1 | 99.00 | 99.00 | https://www.sparkpcb.com/tools/soldering-iron-stati | Supplies |
| Desoldering Copper Wick | 1 | 29.00 | 29.00 | https://www.sparkpcb.com/tools/soldering-accessor | Supplies |

| Description | Qty | Unit price | Total price | Links | Utility |
|--|-----|------------|-------------|---|----------|
| Soldering Flux Paste | 1 | 15.00 | | https://www.sparkpcb.com/tools/soldering-accesso | Supplies |
| Soldering Iron Bit 25Watt Siron | 1 | 79.00 | | https://www.sparkpcb.com/tools/soldering-accesso | |
| Soldering Wire Tin-Lead Rosin Core | 1 | 99.00 | | https://www.sparkpcb.com/tools/speedcon-0.7-mm | |
| Soldering Iron Tip Cleaning Sponge | 1 | 49.00 | | https://www.sparkpcb.com/tools/soldering-iron-tip-h | |
| PYE Screw Driver / Tester combo (8 different bits) | 1 | 259.00 | | https://www.sparkpcb.com/tools/screw-driver-sets/t | |
| 160mm Steel Tweezer | 1 | 39.00 | | https://www.sparkpcb.com/tools/160mm-long-fine-t | |
| 12 mm Kapton Tape for heat resistance | 1 | 199.00 | | https://www.sparkpcb.com/cnc-3d-printer/accessor | |
| 12mm Normally Open Push Button Switch | 4 | 29.00 | | https://www.sparkpcb.com/electronics/12mm-no-re | |
| Resister Pack (150 pcs) assorted | 2 | 79.00 | | https://www.sparkpcb.com/electronics/150pcs-carb | |
| 3 Pin Screw Terminal Green | 5 | 9.00 | | https://www.sparkpcb.com/electronics/3-pin-screw- | |
| 2 Pin Screw Terminal Green | 5 | 6.00 | | https://www.sparkpcb.com/electronics/2-pin-screw- | |
| PCB Mount USB A Socket | 2 | 15.00 | | https://www.sparkpcb.com/electronics/wire-and-cal | |
| 5mm Transparent Red LED | 10 | 2.00 | | https://www.sparkpob.com/electronics/display/led-li | |
| 5mm Transparent Yellow LED | 10 | 2.00 | | https://www.sparkpob.com/electronics/display/led-li | |
| 5mm Transparent Green LED | 10 | 2.00 | | https://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Transparent Blue LED | 10 | 2.00 | | https://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Diffused Red LED | 10 | 2.00 | | https://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Diffused Yellow LED | 10 | 2.00 | | https://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Diffused Green LED | 10 | 2.00 | | https://www.sparkpcb.com/electronics/display/led-li | |
| Milton 2.5 Inch 3 Watt speaker | 2 | 49.00 | 98.00 | https://www.sparkpcb.com/electronics/passive-com | Supplies |
| 20 MM SPDT 3 pin Switch | 4 | 17.00 | 68.00 | https://www.sparkpcb.com/electronics/20-mm-spdt | Supplies |
| 10mm Piezo Buzzer | 3 | 25.00 | 75.00 | https://www.sparkpcb.com/electronics/passive-com | Supplies |
| 10k Variable Resistor | 5 | 8.00 | 40.00 | https://www.sparkpcb.com/electronics/10k-variable | Supplies |
| 6x6mm Tactile Button 4-pin | 10 | 3.00 | 30.00 | https://www.sparkpcb.com/electronics/6x6-mm-4-p | Supplies |
| Push Button On/Off Switch | 10 | 11.00 | 110.00 | https://www.sparkpcb.com/electronics/push-button- | Supplies |
| LM324 Op Amp | 2 | 19.00 | 38.00 | https://www.sparkpcb.com/electronics/lm324-opera | Supplies |
| 30mm Crocodile Clip | 10 | 20.00 | 200.00 | https://www.sparkpcb.com/development/30-mm-cro | Supplies |
| 40 pin Right Angle Male Headers | 4 | 15.00 | 60.00 | https://www.sparkpcb.com/electronics/40-pin-right- | Supplies |
| 40 pin Female Headers | 5 | 9.00 | 45.00 | https://www.sparkpcb.com/electronics/40-pin-state- | Supplies |
| 40 pin Male Headers | 5 | 7.00 | 35.00 | https://www.sparkpcb.com/electronics/40-pin-state- | Supplies |
| 4x4 Membrane Keypad | 2 | 79.00 | 158.00 | https://www.sparkpcb.com/development/4x4-matrix | Supplies |
| 1 Channel 5V Relay | 4 | 69.00 | 276.00 | https://www.sparkpcb.com/development/1-channel- | Supplies |
| Dual Axis Joystick | 1 | 99.00 | 99.00 | https://www.sparkpcb.com/development/dual-axis-x | Supplies |
| 6x4 Inch Perfboard Circuit Board | 5 | 59.00 | 295.00 | https://www.sparkpcb.com/electronics/prototyping/g | Supplies |
| 3x2 Inch Perfboard Circuit Board | 5 | 15.00 | 75.00 | https://www.sparkpcb.com/electronics/prototyping/g | Supplies |
| Rotary Encoder Switch | 3 | 109.00 | 327.00 | https://www.sparkpcb.com/electronics/rotary-encode | Supplies |
| Cable Labels Stickers | 1 | 290.00 | 290.00 | https://www.amazon.in/BIGGEAR-Numbers-Lockin | Supplies |
| Locking Cable Marker (Cable Protector) | 1 | 299.00 | 299.00 | https://www.amazon.in/BIGGEAR-Numbers-Lockin | Supplies |
| Assorted 4, 6, 8, 10, 12 Inch Nylon Cable Ties Zip | 1 | 180.00 | 180.00 | https://www.amazon.in/PR-Electronics-Assorted-O | Supplies |
| 4 Pole Wire Connector Terminal | 10 | 25.00 | 250.00 | https://robu.in/product/pct-214-0-08-2-5mm-5-pole- | Supplies |
| 3 Pole Wire Connector Terminal | 10 | 19.00 | 190.00 | https://robu.in/product/pct-213-0-08-2-5mm-3-pole- | Supplies |
| | | | Subtotal | 9,350.00 | |
| | | | | | |

Tota

This is an approximate estimation, pending to more Notes: additions / deletions.

43,982.00

| | · · · · · · · · · · · · · · · · · · · | | | | | | |
|---|---------------------------------------|------------|-------------|---|--|--|--|
| Description | Qty | Unit price | Total price | Links | Utility | | |
| Sensors & Displays | | | | | | | |
| Dashboard TFT LCD (5') with dashboard camera | 1 | 1,499.00 | 1,499.00 | https://www.amazon.in/Carzex-Dashboard-Screen- | Dashboard Display + Camera | | |
| 3.5 mm Stereo Male to 3 RCA Male Audio Video AV Cable | 1 | 234.00 | 234.00 | https://www.amazon.in/Ekaaz-Stereo-Audio-Camco | Peripheral for Dashboard Display | | |
| Video and Audio Capturing Device Directly from TV | 1 | 499.00 | 499.00 | https://www.amazon.in/Easycap-Video-Capturing-D | Peripheral for Dashboard Camera | | |
| Nokia 5110 84x48 Graphic LCD | 1 | 266.00 | 266.00 | https://www.sparkpcb.com/electronics/nokia-5110-8 | Panel Display | | |
| 16x2 Blue Alphanumeric LCD | 1 | 179.00 | 179.00 | https://www.sparkpcb.com/electronics/16x2-line-blu | Panel Display | | |
| Numeric 7 - Segment Display | 1 | 130.00 | 130.00 | https://www.amazon.in/Segment-Display-Common | Gear Indicator Display | | |
| 7-Segment Driver IC | 1 | 55.00 | 55.00 | https://www.amazon.in/CD4511-Segment-Latch-De | Gear Indicator Display IC | | |
| 74HC595 8 Bit Serial-in Serial or Parallel-out Shift Register | 4 | 29.00 | 116.00 | https://www.sparkpcb.com/electronics/74hc595-8-b | Shift Register for LED Array (rev meter) | | |
| NEO-6M GPS Module with Antenna | 1 | 459.00 | 459.00 | https://www.sparkpcb.com/development/neo-6m-gp | GPS Module | | |
| Voltage Detector Sensor 0-25V | 2 | 109.00 | 218.00 | https://www.sparkpcb.com/sensors/voltage-detection | Gear Position Indicator | | |
| HMC5883L Magnetometer Compass Module | 1 | 239.00 | 239.00 | https://www.sparkpcb.com/sensors/hmc5883l-triple | Compass Module | | |
| 433MHZ LORA SX1278 Long Range Rf Wireless Module | 2 | 449.00 | 898.00 | https://robu.in/product/ai-thinker-lora-ra-01-rf-transe | Onboard Telemetry | | |
| MCP2515 CAN Module | 2 | 385.00 | 770.00 | https://robu.in/product/mcp2515-can-module-tja10 | ECU reader through CAN bus | | |
| MPU-6050 3-Axis Accelerometer and Gyroscope Sensor | 4 | 139.00 | 556.00 | https://www.sparkpcb.com/sensors/mpu6050-gyros | Accelerometer and Gyroscope Sensor | | |
| Reed Switches | 2 | 150.00 | 300.00 | https://www.amazon.in/Electronicspices-Pack-Min | Wheel speed sensor | | |
| Magnetic Reed Switch Glass Ampule | 5 | 39.00 | 195.00 | https://www.sparkpcb.com/sensors/magnetic-read- | Wheel speed sensor | | |
| Potentiometer | 3 | 260.00 | 780.00 | https://www.amazon.in/EPICTAC-Potentiometer-Lin | Miscellanous | | |
| Wired Temperature Sensor | 2 | 95.00 | 190.00 | https://robu.in/product/ds18b20-water-proof-tempe | Radiator temperature sensor | | |
| IR Temperature Sensor | 2 | 999.00 | 1,998.00 | https://robu.in/product/mlx90614-esf-non-contact-h | Brake Disc Temperature sensor | | |
| | | | Subtotal | 9,581.00 | | | |
| | | | | | | | |

Total

This is an approximate estimation, pending to more Notes: additions / deletions.

9,581.00

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|---|--------|------------------|------------------|---|----------|
| Description | Qty | Unit price | Total price | Links | Utility |
| | 1 | | Supplies & | | Sunnline |
| Black Connecting Wire 24 AWG | | 249.00 | | tps://robu.in/product/high-quality-24awg-silicone- | |
| Red Connecting Wire 24 AWG | 1 | 249.00 | | tps://robu.in/product/24awg-silicone-wire/ | Supplies |
| Male to Female Jumper Cables | 2 | 55.00 | | tps://robu.in/product/male-to-female-jumper-wires | |
| Male to Male Jumper Cables | 2 | 65.00 | _ | tps://robu.in/product/male-to-male-jumper-wires- | |
| Female to Female Jumper Cables | 2 | 55.00 | | tps://robu.in/product/20cm-dupont-wire-color-jum | |
| Breadboard | 2 | 78.00 | | tps://robu.in/product/breadboard-840-tie-points-s | |
| mini Breadboard | 4 | 50.00 | | tps://robu.in/product/170-pts-mini-breadboard-syl | |
| Wire Nipper / Angle Cutter | 1 | 179.00 | _ | tps://www.sparkpcb.com/tools/stripper-cutter-plie | |
| PYE Wire Stripper | 1 | 69.00 | | tps://www.sparkpcb.com/tools/stripper-cutter-plie | |
| Mastech Multimeter | 1 | 819.00 | | tps://www.sparkpcb.com/test-equipments/multime | |
| Hot Glue Gun | 1 5 | 249.00 118.00 | | tps://robu.in/product/standard-temperature-corde | |
| Hot Melt Glue Sticks (11 mm) Heat Shrink Tubing | 1 | 429.00 | | tps://www.amazon.in/Glun-11MM-Transparent-St tps://robu.in/product/colorful-heat-shrink-tubing-h | |
| Buck Converter 12v to 5v (300W) | 1 | 450.00 | | tos://www.amazon.in/xcluma-Converter-1-2-35V- | • • • |
| DC to DC Buck Regulator (75W) | 2 | 169.00 | _ | tps://www.sparkpcb.com/development/xl4015-5a | |
| Soldering Iron Soldoron 25Watt | 1 | 399.00 | _ | tps://www.sparkpcb.com/tools/soldering-iron-stati | |
| Soldering Iron Stand | 1 | 99.00 | _ | tps://www.sparkpcb.com/tools/soldering-iron-stati | |
| Desoldering Copper Wick | 1 | 29.00 | | tps://www.sparkpcb.com/tools/soldering-iron-stati | |
| Soldering Copper Wick Soldering Flux Paste | 1 | 15.00 | _ | tps://www.sparkpcb.com/tools/soldering-accesso | |
| Soldering Iron Bit 25Watt Siron | 1 | 79.00 | | tps://www.sparkpcb.com/tools/soldering-accesso | |
| Soldering Wire Tin-Lead Rosin Core | 1 | 99.00 | _ | tps://www.sparkpcb.com/tools/soldering-accesso | |
| Soldering Wife TirrLead Rosin Core Soldering Iron Tip Cleaning Sponge | 1 | 49.00 | | tps://www.sparkpcb.com/tools/speedcon-c.r-min | |
| PYE Screw Driver / Tester combo (8 different bits) | 1 | 259.00 | | tps://www.sparkpcb.com/tools/screw-driver-sets/j | |
| 160mm Steel Tweezer | 1 | 39.00 | | tps://www.sparkpcb.com/tools/screw-griver-sets/j | |
| | 1 | 199.00 | | tps://www.sparkpcb.com/coos/Toomm-long-line-t tps://www.sparkpcb.com/cnc-3d-printer/accessor | |
| 12 mm Kapton Tape for heat resistance | 4 | 29.00 | | tps://www.sparkpcb.com/cnc-30-printer/accessor | |
| 12mm Normally Open Push Button Switch | 2 | | _ | tps://www.sparkpcb.com/electronics/12mm-no-re tps://www.sparkpcb.com/electronics/150pcs-carb | |
| Resister Pack (150 pcs) assorted | 5 | 79.00 | | tps://www.sparkpcb.com/electronics/150pcs-carb tps://www.sparkpcb.com/electronics/3-pin-screw- | |
| 3 Pin Screw Terminal Green | 5 | 9.00 | _ | tps://www.sparkpcb.com/electronics/3-pin-screw- tps://www.sparkpcb.com/electronics/2-pin-screw- | |
| 2 Pin Screw Terminal Green | 2 | 6.00 | | tps://www.sparkpcb.com/electronics/2-pin-screw- tps://www.sparkpcb.com/electronics/wire-and-cal | |
| PCB Mount USB A Socket | 10 | 15.00 | _ | | |
| 5mm Transparent Red LED | 10 | 2.00 | | tps://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Transparent Yellow LED | 10 | 2.00 | | tps://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Transparent Green LED | | 2.00 | | tps://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Transparent Blue LED | 10 | 2.00 | | tps://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Diffused Red LED | 10 | 2.00 | | tps://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Diffused Yellow LED | 10 | 2.00 | _ | tps://www.sparkpcb.com/electronics/display/led-li | |
| 5mm Diffused Green LED | 10 | 2.00 | | tps://www.sparkpcb.com/electronics/display/led-li | |
| Milton 2.5 Inch 3 Watt speaker | 2 | 49.00 | | tps://www.sparkpcb.com/electronics/passive-com | |
| 20 MM SPDT 3 pin Switch | 4 | 17.00 | | tps://www.sparkpcb.com/electronics/20-mm-spdt | |
| 10mm Piezo Buzzer | 3 | 25.00 | | tps://www.sparkpcb.com/electronics/passive-com | |
| 10k Variable Resistor | 5 | 8.00 | _ | tps://www.sparkpcb.com/electronics/10k-variable | |
| 6x6mm Tactile Button 4-pin | 10 | 3.00 | _ | tps://www.sparkpcb.com/electronics/6x6-mm-4-p | |
| Push Button On/Off Switch | 10 | 11.00 | | tps://www.sparkpcb.com/electronics/push-button- | |
| LM324 Op Amp | 2 | 19.00 | | tps://www.sparkpcb.com/electronics/lm324-opera | |
| 30mm Crocodile Clip | 10 | 20.00 | | tps://www.sparkpcb.com/development/30-mm-cro | |
| 40 pin Right Angle Male Headers | 4 | 15.00 | _ | tps://www.sparkpcb.com/electronics/40-pin-right- | |
| 40 pin Female Headers | 5 | 9.00 | | tps://www.sparkpcb.com/electronics/40-pin-state- | |
| 40 pin Male Headers | 5 | 7.00 | _ | tps://www.sparkpcb.com/electronics/40-pin-state- | |
| 4x4 Membrane Keypad | 2 | 79.00 | 158.00 <u>ht</u> | tps://www.sparkpcb.com/development/4x4-matrix | Supplies |
| 1 Channel 5V Relay | 4 | 69.00 | | tps://www.sparkpcb.com/development/1-channel- | |
| Dual Axis Joystick | 1 | 99.00 | | tps://www.sparkpcb.com/development/dual-axis- | |
| 6x4 Inch Perfboard Circuit Board | 5 | 59.00 | 295.00 <u>ht</u> | tps://www.sparkpcb.com/electronics/prototyping/g | Supplies |
| 3x2 Inch Perfboard Circuit Board | 5 | 15.00 | 75.00 <u>ht</u> | tps://www.sparkpcb.com/electronics/prototyping/g | Supplies |
| Rotary Encoder Switch | 3 | 109.00 | 327.00 <u>ht</u> | tps://www.sparkpcb.com/electronics/rotary-encod | Supplies |
| Cable Labels Stickers | 1 | 290.00 | 290.00 <u>ht</u> | tps://www.amazon.in/BIGGEAR-Numbers-Lockin | Supplies |
| Locking Cable Marker (Cable Protector) | 1 | 299.00 | 299.00 <u>ht</u> | tps://www.amazon.in/BIGGEAR-Numbers-Lockin | Supplies |
| Assorted 4, 6, 8, 10, 12 Inch Nylon Cable Ties Zip | 1 | 180.00 | 180.00 <u>ht</u> | tps://www.amazon.in/PR-Electronics-Assorted-O | Supplies |
| 4 Pole Wire Connector Terminal | 10 | 25.00 | 250.00 ht | tps://robu.in/product/pct-214-0-08-2-5mm-5-pole- | Supplies |
| 3 Pole Wire Connector Terminal | 10 | 19.00 | | tps://robu.in/product/pct-213-0-08-2-5mm-3-pole- | |
| | | | | 350.00 | |

| Description | Qty | Unit price | Total price | Links | Utility | | | |
|--|------------------|------------|-------------|--|---|--|--|--|
| | Onboard Computer | | | | | | | |
| HDMI to USB Video Capture | 1 | 890.00 | 890.00 | https://www.amazon.in/Tobo-Levoty-Game-Capture | Peripheral for Onboard Computer | | | |
| PL2303 USB to TTL module | 2 | 109.00 | 218.00 | https://www.sparkpcb.com/development/communic | Peripheral for Onboard Computer | | | |
| USB To TTL Serial Cable Debugger | 2 | 149.00 | 298.00 | https://robu.in/product/pl2303-ta-download-cable- | Peripheral for Onboard Computer | | | |
| RTC Real Time Clock DS1307 | 2 | 99.00 | 198.00 | https://robu.in/product/rtc-ds1307-i2c-real-time-clock | Peripheral for Onboard Computer | | | |
| GPIO Shield Expansion board for Raspberry Pi | 1 | 249.00 | 249.00 | https://www.sparkpcb.com/development/gpio-shield | Peripheral for Onboard Computer | | | |
| 4 Ports USB Hub | 1 | 444.00 | 444.00 | https://www.amazon.in/Zebronics-100HB-High-Spe | Peripheral for Onboard Computer | | | |
| | | | Subtotal | 2,297.00 | | | | |
| | | | | | | | | |
| | | | Onboard Mi | icrocontroller | | | | |
| Arduino Nano | 2 | 419.00 | 838.00 | https://robu.in/product/arduino-nano-v3-0-ch340-c | Basic portable Microcontroller for analog signals | | | |
| Arduino Uno | 2 | 499.00 | 998.00 | https://robu.in/product/arduino-uno-r3-ch340g-atm | Basic Microcontroller for analog signals | | | |
| Arduino Uno Cable (USB A to B) | 2 | 34.00 | 68.00 | https://robu.in/product/cable-for-arduino-unomega | Peripheral for Onboard microcontroller | | | |
| Arduino Lilypad | 4 | 319.00 | 1,276.00 | https://www.sparkpcb.com/development/arduino-lily | Basic portable Microcontroller for analog signals | | | |
| ESP8266 NodeMCU | 1 | 339.00 | 339.00 | https://robu.in/product/nodemcu-esp8266-v3-lua-c | Wireless Onboard microcontroller | | | |
| ESP8266 NodeMCU Cable (USB A to micro B) | 1 | 69.00 | 69.00 | https://robu.in/product/micro-usb-a-to-micro-b-cab | Peripheral for Wireless Onboard microcontroller | | | |
| Micro SD Card Reader | 2 | 99.00 | 198.00 | https://www.sparkpcb.com/development/micro-sd | Data logging for microcontrollers | | | |
| | | | Subtotal | 3,786.00 | | | | |
| | | | | | | | | |
| | | | Sensors | & Displays | | | | |
| MPXV7002DP Air Speed Sensor And Pitot Tube | 1 | 3,890.00 | 3,890.00 | https://robu.in/product/air-speed-sensor-and-pitot-tr | <u> Pitot Tube</u> | | | |
| | | | Subtotal | 3,890.00 | | | | |

Tota

This is an approximate estimation, pending to more Notes: additions / deletions.

9,973.00

| Description | Qty | Unit price | Total price | Links | Utility | | | |
|--|-----|------------|-------------|---|---------------------------------|--|--|--|
| Onboard Computer | | | | | | | | |
| Raspberry Pi 4: 8GB kit | 1 | 8,600.00 | 8,600.00 | https://www.amazon.in/India-Raspberry-Charger-H | Onboard computer + peripherals | | | |
| SanDisk 32GB Class 10 Micro SDHC Memory Card | 1 | 590.00 | 590.00 | https://www.amazon.in/SanDisk-Class-Memory-Ad | Peripheral for Onboard Computer | | | |
| | | | Subtotal | 9,190.00 | | | | |

Total

This is an approximate estimation, pending to more Notes: additions / deletions.

9,190.00

| Description | Qty | Unit price | Total price | Links | Utility | | |
|--|-----|------------|-------------|---|---|--|--|
| Onboard Computer Comp | | | | | | | |
| Raspberry Pi 4: 4GB | 1 | 4,990.00 | 4,990.00 | https://robu.in/product/raspberry-pi-4-model-b-with | Backup onboard computer for CV/ROS applications | | |
| Raspberry Pi 4: Case and Fan | 2 | 449.00 | 898.00 | https://www.amazon.in/India-Raspberry-Option-Mo | Peripheral for Onboard Computer | | |
| | | | Subtotal | 5,888.00 | | | |

Tota

This is an approximate estimation, pending to more Notes: additions / deletions.

5,888.00

Bill of Materials (prev)

| | | | Mate | eriais (prev) | |
|--|---|---|--|--|--|
| Description | Qty | Unit price | Total price | Links | Utility |
| | | | | Computer | |
| Raspberry Pi 4: 8GB kit | 1 | 8,600.00 | 8,600.00 | https://www.amazon.in/India-Raspberry-Charger-h | Onboard computer + peripherals |
| HDMI to USB Video Capture | 1 | 890.00 | | https://www.amazon.in/Tobo-Levoty-Game-Captu | • |
| PL2303 USB to TTL module | 2 | 109.00 | | https://www.sparkpcb.com/development/communi | |
| JSB To TTL Serial Cable Debugger | 2 | 149.00 | 298.00 | https://robu.in/product/pl2303-ta-download-cable | Peripheral for Onboard Computer |
| RTC Real Time Clock DS1307 | 2 | 99.00 | 198.00 | https://robu.in/product/rtc-ds1307-i2c-real-time-clo | Peripheral for Onboard Computer |
| GPIO Shield Expansion board for Raspberry Pi | 1 | 249.00 | 249.00 | https://www.sparkpcb.com/development/gpio-shie | Peripheral for Onboard Computer |
| | | | Subtotal | 10,453.00 | |
| | | | Onboard Mi | crocontroller | |
| Arduino Nano | 2 | 419.00 | 838.00 | https://robu.in/product/arduino-nano-v3-0-ch340-c | Basic portable Microcontroller for analog sign |
| Arduino Uno | 2 | 499.00 | 998.00 | https://robu.in/product/arduino-uno-r3-ch340g-atr | Basic Microcontroller for analog signals |
| Arduino Uno Cable (USB A to B) | 2 | 34.00 | 68.00 | https://robu.in/product/cable-for-arduino-unomeg | Peripheral for Onboard microcontroller |
| Arduino Lilypad | 2 | 319.00 | 638.00 | https://www.sparkpcb.com/development/arduino-li | Basic portable Microcontroller for analog sign |
| ESP8266 NodeMCU | 1 | 339.00 | | https://robu.in/product/nodemcu-esp8266-v3-lua- | |
| ESP8266 NodeMCU Cable (USB A to micro B) | 1 | 69.00 | 69.00 | https://robu.in/product/micro-usb-a-to-micro-b-ca | Peripheral for Wireless Onboard microcontrol |
| | | 07.00 | Subtotal | 2,950.00 | |
| | | | Sancore | & Displays | |
| ashboard TFT LCD (5') with dashboard camera | 1 | 1,499.00 | | https://www.amazon.in/Carzex-Dashboard-Screen | Dashboard Display + Camera |
| .5 mm Stereo Male to 3 RCA Male Audio Video AV Cable | 1 | 234.00 | 234.00 | https://www.amazon.in/Ekaaz-Stereo-Audio-Camo | Peripheral for Dashboard Display |
| /ideo and Audio Capturing Device Directly from TV | 1 | 499.00 | | https://www.amazon.in/Easycap-Video-Capturing- | • |
| lokia 5110 84x48 Graphic LCD | 1 | 266.00 | | https://www.sparkpcb.com/electronics/nokia-5110- | |
| 6x2 Blue Alphanumeric LCD | 1 | 179.00 | | https://www.sparkpcb.com/electronics/16x2-line-bl | |
| Jumeric 7 - Segment Display | 1 | 130.00 | | https://www.amazon.in/Segment-Display-Commo | |
| -Segment Driver IC | 1 | 55.00 | 55.00 | https://www.amazon.in/CD4511-Segment-Latch-D | Gear Indicator Display IC |
| 4HC595 8 Bit Serial-in Serial or Parallel-out Shift Register | 2 | 29.00 | 58.00 | https://www.sparkpcb.com/electronics/74hc595-8- | Shift Register for LED Array (rev meter) |
| EO-6M GPS Module with Antenna | 1 | 459.00 | 459.00 | https://www.sparkpcb.com/development/neo-6m-c | r GPS Module |
| /oltage Detector Sensor 0-25V | 2 | 109.00 | | https://www.sparkpcb.com/sensors/voltage-detect | |
| MC5883L Magnetometer Compass Module | 1 | 239.00 | 239.00 | https://www.sparkpcb.com/sensors/hmc5883l-triple | Compass Module |
| 33MHZ LORA SX1278 Long Range Rf Wireless Module | 2 | 449.00 | 898.00 | https://robu.in/product/ai-thinker-lora-ra-01-rf-trans | Onboard Telemetry |
| MCP2515 CAN Module | 2 | 385.00 | 770.00 | https://robu.in/product/mcp2515-can-module-tja1 | ECU reader through CAN bus |
| MPU-6050 3-Axis Accelerometer and Gyroscope Sensor | 4 | 139.00 | 556.00 | https://www.sparkpcb.com/sensors/mpu6050-gyro | Accelerometer and Gyroscope Sensor |
| Reed Switches | 2 | 150.00 | 300.00 | https://www.amazon.in/Electronicspices-Pack-Min | Wheel speed sensor |
| Magnetic Reed Switch Glass Ampule | 5 | 39.00 | 195.00 | https://www.sparkpcb.com/sensors/magnetic-read | Wheel speed sensor |
| Potentiometer | 2 | 260.00 | 520.00 | https://www.amazon.in/EPICTAC-Potentiometer-L | Miscellanous |
| Temperature Sensor | 2 | 95.00 | 190.00 | https://robu.in/product/ds18b20-water-proof-temper | Radiator temperature sensor |
| | | | Subtotal | 7,265.00 | |
| | | | | s & misc | |
| | | | Supplie | | |
| Black Connecting Wire 24 AWG | 1 | 249.00 | | https://robu.in/product/high-quality-24awg-silicone | Supplies |
| - | 1 | | 249.00 | | Supplies Supplies |
| ted Connecting Wire 24 AWG | | 249.00 | 249.00 249.00 | https://robu.in/product/24awg-silicone-wire/ | Supplies |
| ted Connecting Wire 24 AWG Male to Female Jumper Cables | 1 | 249.00 55.00 | 249.00 249.00 110.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wire | Supplies Supplies |
| ted Connecting Wire 24 AWG Male to Female Jumper Cables Male to Male Jumper Cables | 1 | 249.00 55.00 65.00 | 249.00 249.00 110.00 130.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- | Supplies Supplies Supplies |
| Red Connecting Wire 24 AWG Male to Female Jumper Cables Male to Male Jumper Cables Female to Female Jumper Cables | 1 2 2 | 249.00 55.00 65.00 55.00 | 249.00 249.00 110.00 130.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wire/ https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jum | Supplies Supplies Supplies Supplies |
| ted Connecting Wire 24 AWG Male to Female Jumper Cables Male to Male Jumper Cables Female to Female Jumper Cables Female to Female Jumper Cables | 1 2 2 2 | 249.00 55.00 65.00 55.00 78.00 | 249.00 249.00 110.00 130.00 110.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/breadboard-840-tie-points-s | Supplies Supplies Supplies Supplies Supplies |
| Red Connecting Wire 24 AWG Male to Female Jumper Cables Male to Male Jumper Cables Female to Female Jumper Cables Freadboard Inini Breadboard | 1 2 2 2 2 2 4 | 249.00 55.00 65.00 55.00 78.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wire/ https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy | Supplies Supplies Supplies Supplies Supplies Supplies Supplies |
| ted Connecting Wire 24 AWG Male to Female Jumper Cables Male to Male Jumper Cables iemale to Female Jumper Cables ireadboard nini Breadboard Vire Cutter | 1 2 2 2 2 | 249.00 55.00 65.00 55.00 78.00 50.00 | 249.00 249.00 110.00 130.00 110.00 200.00 57.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/multitec-150b-wire-stripper- | Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies |
| Black Connecting Wire 24 AWG Red Connecting Wire 24 AWG Ale to Female Jumper Cables Ale to Male Jumper Cables Female to Female Jumper Cables Female to Female Jumper Cables Freadboard Inini Breadboard Vire Cutter Asstech Multimeter Into Clue Gun | 1 2 2 2 2 2 4 1 | 249.00 55.00 65.00 55.00 78.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wire/ https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy | Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Instrument |
| Red Connecting Wire 24 AWG Male to Female Jumper Cables Male to Male Jumper Cables Female to Female Jumper Cables Freadboard Mini Breadboard Mastech Multimeter | 1 2 2 2 2 4 1 | 249.00 55.00 65.00 55.00 78.00 50.00 57.00 819.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product//acm-dupont-wire-color-jun- https://robu.in/product//20cm-dupont-wire-color-jun- https://robu.in/product//170-pts-mini-breadboard-sy- https://robu.in/product//170-pts-mini-breadboard-sy- https://robu.in/product/multitec-150b-wire-stripper- https://www.sparkpcb.com/test-equipments/multim- | Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Appliance |
| Red Connecting Wire 24 AWG Male to Female Jumper Cables Male to Male Jumper Cables Female to Female Jumper Cables Freadboard Inini Breadboard Wire Cutter Mastech Multimeter Hot Glue Gun | 1 2 2 2 2 2 4 1 1 1 3 3 1 | 249.00 55.00 65.00 55.00 78.00 50.00 57.00 819.00 249.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wire/ https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/multitec-150b-wire-stripper- https://www.sparkpcb.com/test-equipments/multim https://robu.in/product/standard-temperature-corde | Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Appliance Supplies |
| ed Connecting Wire 24 AWG fale to Female Jumper Cables fale to Male Jumper Cables famale to Female Jumper Cables freadboard finin Breadboard five Cutter fastech Multimeter fot Glue Gun fot Melt Glue Sticks (11 mm) feat Shrink Tubing | 1 2 2 2 2 4 1 1 1 3 1 1 1 | 249.00 55.00 65.00 55.00 78.00 50.00 57.00 819.00 249.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 429.00 450.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wire/ https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/multitec-150b-wire-stripper- https://robu.in/product/standard-temperature-corde https://robu.in/product/standard-temperature-corde https://robu.in/product/colorful-heat-shrink-tubing- https://robu.in/product/colorful-heat-shrink-tubing- https://www.amazon.in/scluma-Converter-1-2-35V | Supplies |
| ed Connecting Wire 24 AWG fale to Female Jumper Cables fale to Male Jumper Cables female to Female Jumper Cables freadboard fini Breadboard fivire Cutter flastech Multimeter fot Glue Gun fot Melt Glue Sticks (11 mm) fleat Shrink Tubing fluck Converter 12v to 5v (300W) | 1 2 2 2 2 4 1 1 1 3 3 1 1 2 2 | 249.00 55.00 65.00 55.00 78.00 50.00 57.00 819.00 249.00 118.00 429.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 429.00 450.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wire/ https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/multitec-150b-wire-stripper- https://www.sparkpcb.com/test-equipments/multim https://robu.in/product/standard-temperature-cord- https://www.amazon.in/Glun-11MM-Transparent-Shttps://robu.in/product/colorful-heat-shrink-tubing- | Supplies |
| ed Connecting Wire 24 AWG fale to Female Jumper Cables fale to Male Jumper Cables emale to Female Jumper Cables emale to Female Jumper Cables readboard finin Breadboard fire Cutter flastech Multimeter fot Glue Gun fot Melt Glue Sticks (11 mm) fleat Shrink Tubing ruck Converter 12v to 5v (300W) for DC Buck Regulator (75W) | 1 2 2 2 2 4 1 1 1 3 1 1 1 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 118.00 429.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 429.00 450.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wire/ https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/multitec-150b-wire-stripper- https://robu.in/product/standard-temperature-corde https://robu.in/product/standard-temperature-corde https://robu.in/product/colorful-heat-shrink-tubing- https://robu.in/product/colorful-heat-shrink-tubing- https://www.amazon.in/scluma-Converter-1-2-35V | Supplies |
| ed Connecting Wire 24 AWG fale to Female Jumper Cables fale to Male Jumper Cables emale to Female Jumper Cables readboard finin Breadboard fire Cutter fastech Multimeter ot Glue Gun ot Melf Glue Sticks (11 mm) leat Shrink Tubing uck Converter 12v to 5v (300W) C to DC Buck Regulator (75W) oldering Iron Soldoron 25Watt | 1 2 2 2 2 4 1 1 1 3 3 1 1 2 2 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 118.00 429.00 450.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 429.00 450.00 338.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product//ale-to-male-jumper-wires- https://robu.in/product//20cm-dupont-wire-color-jun https://robu.in/product//20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/multitec-150b-wire-stripper- https://www.sparkpcb.com/test-equipments/multim https://robu.in/product/standard-temperature-cord- https://www.amazon.in/Clun-11MM-Transparent-S- https://www.amazon.in/scluma-Converter-1-2-35V https://www.amazon.in/scluma-Converter-1-2-35V https://www.sparkpcb.com/development/xl4015-5a | Supplies |
| ed Connecting Wire 24 AWG fale to Female Jumper Cables fale to Male Jumper Cables emale to Female Jumper Cables readboard finin Breadboard fire Cutter fastech Multimeter of Glue Gun fot Melt Glue Sticks (11 mm) leat Shrink Tubing uck Converter 12v to 5v (300W) C to DC Buck Regulator (75W) oldering Iron Soldoron 25Watt esoldering Copper Wick | 1 2 2 2 2 4 1 1 1 3 1 1 2 1 1 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 118.00 429.00 450.00 169.00 399.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 429.00 450.00 338.00 399.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/multitec-150b-wire-stripper- https://www.sparkpcb.com/test-equipments/multim- https://robu.in/product/standard-temperature-cord- https://www.amazon.in/Clun-11MM-Transparent-Shttps://www.amazon.in/sclun-20verter-1-2-35V- https://www.amazon.in/scluma-Converter-1-2-35V- https://www.sparkpcb.com/development/xl4015-5a- https://www.sparkpcb.com/development/xl4015-5a- https://www.sparkpcb.com/dols/soldering-iron-sta- | Supplies |
| Adel to Female Jumper Cables Male advant More Cables Male advant More Cutter Mastech Multimeter Mot Glue Gun Mot Melt Glue Sticks (11 mm) Meat Shrink Tubing More Converter 12v to 5v (300W) More Converter 12v to 5v (300W) More Converter More Male Male More | 1 2 2 2 2 4 1 1 1 3 1 1 2 1 1 1 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 118.00 429.00 450.00 169.00 399.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 429.00 450.00 338.00 399.00 29.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/multitec-150b-wire-stripper- https://www.sparkpcb.com/test-equipments/multim https://robu.in/product/standard-temperature-cords https://www.amazon.in/clun-11MM-Transparent-Sh https://www.amazon.in/clun-20nverter-1-2-35V https://www.sparkpcb.com/development/xl4015-5s https://www.sparkpcb.com/dools/soldering-iron-sta https://www.sparkpcb.com/tools/soldering-accesses | Supplies |
| ed Connecting Wire 24 AWG fale to Female Jumper Cables fale to Male Jumper Cables freadboard fale to Female Jumper Cables freadboard freadboard for Cutter fastech Multimeter fot Glue Gun fot Melt Glue Sticks (11 mm) feetat Shrink Tubing fuck Converter 12v to 5v (300W) for to DC Buck Regulator (75W) foldering Iron Soldoron 25Watt feesoldering Copper Wick foldering Iron Bit 25Watt Siron | 1 2 2 2 4 1 1 1 3 1 1 2 1 1 1 1 1 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 429.00 450.00 169.00 399.00 29.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 354.00 429.00 338.00 399.00 29.00 15.00 79.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/20cm-dupont-wire-color-jun https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/170-pts-mini-breadboard-sy https://robu.in/product/multitec-150b-wire-stripper- https://robu.in/product/standard-temperature-cord- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.amazon.in/scluma-Converter-12-35V- https://www.sparkpcb.com/development/xl4015-5a- https://www.sparkpcb.com/dos/soldering-accesse- https://www.sparkpcb.com/tools/soldering-accesse- | Supplies |
| led Connecting Wire 24 AWG falle to Female Jumper Cables falle to Female Jumper Cables freadboard falle to Female Jumper Cables freadboard fread | 1 2 2 2 4 1 1 1 3 1 1 2 1 1 1 1 1 1 1 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 418.00 450.00 169.00 399.00 29.00 15.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 354.00 450.00 338.00 399.00 29.00 15.00 79.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/multitec-150b-wire-stripper- https://www.sparkpcb.com/test-equipments/multim- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.amazon.in/Glun-1thM-Transparent-S- https://www.amazon.in/scluma-Converter-1-2-35V- https://www.sparkpcb.com/development/xl4015-5a- https://www.sparkpcb.com/tools/soldering-accesse- https://www.sparkpcb.com/tools/soldering-access | Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Instrument Appliance Supplies |
| Adel to Female Jumper Cables Male to Female Jumper Cables Material Streathourd Mini Breadboard Mire Cutter Mastech Multimeter Most Glue Gun Hot Melt Glue Sticks (11 mm) Material Shrink Tubing Muck Converter 12v to 5v (300W) Mot to DC Buck Regulator (75W) Moldering Iron Soldoron 25Watt Mosoldering Flux Paste Moldering Iron Bit 25Watt Siron Moldering Wire Tin-Lead Rosin Core Moldering Iron Tip Cleaning Sponge | 1 2 2 2 4 1 1 1 1 2 1 1 1 1 1 1 1 1 1 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 429.00 450.00 69.00 79.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 354.00 354.00 399.00 29.00 15.00 79.00 99.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/170-pts-mini-breadboard-sy- https://www.sparkpcb.com/test-equipments/multim- https://www.sparkpcb.com/test-equipments/multim- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.sparkpcb.com/dole/soldering-in-sta- https://www.sparkpcb.com/dole/soldering-accesse- https://www.sparkpcb.com/tools/soldering-accesse- https://www.sparkpcb.com/tools/speedcon-0.7-mm | Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Instrument Appliance Supplies |
| Adel to Female Jumper Cables Male Male Male Male Male Male Male Male | 1 2 2 2 4 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 450.00 169.00 399.00 79.00 99.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 354.00 354.00 350.00 399.00 29.00 15.00 79.00 99.00 49.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/170-pts-mini-breadboard-sy- https://www.sparkpcb.com/test-equipments/multim- https://www.sparkpcb.com/test-equipments/multim- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.sparkpcb.com/dole/soldering-iron-sta- https://www.sparkpcb.com/tools/soldering-accesso- https://www.sparkpcb.com/tools/soldering-accesso- https://www.sparkpcb.com/tools/soldering-accesso- https://www.sparkpcb.com/tools/soldering-accesso- https://www.sparkpcb.com/tools/soldering-accesso- https://www.sparkpcb.com/tools/soldering-accesso- https://www.sparkpcb.com/tools/soldering-accesso- https://www.sparkpcb.com/tools/soldering-accesso- https://www.sparkpcb.com/tools/soldering-accesso- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- | Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Instrument Appliance Supplies |
| Adale to Female Jumper Cables Male to Female Jumper Cables Male to Male Jumper Cables Male to Male Jumper Cables Male to Female Jumper Cables Male to Female Jumper Cables Male to Female Jumper Cables Material Male Male Male Male Male Male Male Ma | 1 2 2 2 4 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 450.00 169.00 399.00 29.00 15.00 79.00 99.00 49.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 354.00 354.00 399.00 29.00 15.00 79.00 99.00 49.00 179.00 259.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/170-pts-mini-breadboard-sy- https://www.sparkpcb.com/dast-temperature-cord- https://www.sparkpcb.com/clast-temperature-cord- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.amazon.in/scluma-Converter-1-2-35V- https://www.sparkpcb.com/development/xl4015-5a- https://www.sparkpcb.com/dools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/soldering-iron-tip- https://www.sparkpcb.com/tools/stripper-cutter-plie- | Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Instrument Appliance Supplies Appliance Appliance |
| Red Connecting Wire 24 AWG Male to Female Jumper Cables Male to Male Jumper Cables Female to Female Jumper Cables Breadboard Nire Cutter Mastech Multimeter Hot Glue Gun Hot Melt Glue Sticks (11 mm) | 1 2 2 2 4 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 | 249.00 55.00 65.00 78.00 50.00 57.00 819.00 249.00 450.00 169.00 399.00 29.00 15.00 79.00 49.00 179.00 259.00 | 249.00 249.00 110.00 130.00 110.00 156.00 200.00 57.00 819.00 249.00 354.00 354.00 354.00 399.00 29.00 15.00 79.00 99.00 49.00 179.00 259.00 69.00 | https://robu.in/product/24awg-silicone-wire/ https://robu.in/product/male-to-female-jumper-wires- https://robu.in/product/male-to-male-jumper-wires- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/20cm-dupont-wire-color-jun- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/170-pts-mini-breadboard-sy- https://robu.in/product/multitec-150b-wire-stripper- https://www.sparkpcb.com/test-equipments/multim- https://www.sparkpcb.com/test-equipments/multim- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.amazon.in/Glun-11MM-Transparent-S- https://www.amazon.in/cluma-Converter-1-2-350- https://www.sparkpcb.com/tools/soldering-iron-sta- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-accessor- https://www.sparkpcb.com/tools/soldering-iron-lip- https://www.sparkpcb.com/tools/stripper-cutter-plie- https://www.sparkpcb.com/tools/stripper-cutter-plie- https://www.sparkpcb.com/tools/screw-driver-sets- | Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Instrument Appliance Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Supplies Appliance Supplies Supplies Supplies Appliance Supplies Supplies Appliance Appliance Appliance Appliance |

Bill of Materials (prev)

| | | | | (p. 01) | |
|---------------------------------------|-----|------------|---------------------|--|-------------------|
| Description | Qty | Unit price | Total price | Links | Utility |
| 12mm Normally Open Push Button Switch | 2 | 29.00 | 58.00 <u>h</u> | https://www.sparkpcb.com/electronics/12mm-no-re | Supplies |
| Resister Pack (150 pcs) assorted | 1 | 79.00 | 79.00 b | https://www.sparkpcb.com/electronics/150pcs-carb | Supplies |
| 3 Pin Screw Terminal Green | 5 | 9.00 | 45.00 <u>h</u> | https://www.sparkpcb.com/electronics/3-pin-screw- | Supplies |
| 2 Pin Screw Terminal Green | 5 | 6.00 | 30.00 <u>h</u> | https://www.sparkpcb.com/electronics/2-pin-screw- | Supplies |
| PCB Mount USB A Socket | 2 | 15.00 | 30.00 <u>h</u> | https://www.sparkpcb.com/electronics/wire-and-ca | Supplies |
| 5mm Transparent Red LED | 10 | 2.00 | 20.00 b | nttps://www.sparkpcb.com/electronics/display/led-l | <u>j</u> Supplies |
| 5mm Transparent Yellow LED | 10 | 2.00 | 20.00 <u>h</u> | https://www.sparkpcb.com/electronics/display/led-l | <u>j</u> Supplies |
| 5mm Transparent Green LED | 10 | 2.00 | 20.00 <u>h</u> | https://www.sparkpcb.com/electronics/display/led-l | <u>j</u> Supplies |
| 5mm Transparent Blue LED | 10 | 2.00 | 20.00 <u>h</u> | https://www.sparkpcb.com/electronics/display/led-l | <u>j</u> Supplies |
| 5mm Diffused Red LED | 10 | 2.00 | 20.00 <u>h</u> | nttps://www.sparkpcb.com/electronics/display/led-l | Supplies |
| 5mm Diffused Yellow LED | 10 | 2.00 | 20.00 <u>h</u> | https://www.sparkpcb.com/electronics/display/led-l | Supplies |
| 5mm Diffused Green LED | 10 | 2.00 | 20.00 <u>h</u> | https://www.sparkpcb.com/electronics/display/led-l | <u>j</u> Supplies |
| Milton 2.5 Inch 3 Watt speaker | 1 | 49.00 | 49.00 <u>h</u> | https://www.sparkpcb.com/electronics/passive-com | Supplies |
| 20 MM SPDT 3 pin Switch | 1 | 17.00 | 17.00 <u>h</u> | https://www.sparkpcb.com/electronics/20-mm-spdt | Supplies |
| 10mm Piezo Buzzer | 3 | 25.00 | 75.00 <u>h</u> | https://www.sparkpcb.com/electronics/passive-com | <u>n</u> Supplies |
| 10k Variable Resistor | 5 | 8.00 | 40.00 <u>h</u> | https://www.sparkpcb.com/electronics/10k-variable | Supplies |
| 6x6mm Tactile Button 4-pin | 10 | 3.00 | 30.00 <u>h</u> | https://www.sparkpcb.com/electronics/6x6-mm-4-p | Supplies |
| Push Button On/Off Switch | 5 | 11.00 | 55.00 _h | https://www.sparkpcb.com/electronics/push-button | Supplies |
| LM324 Op Amp | 1 | 19.00 | 19.00 <u>h</u> | https://www.sparkpcb.com/electronics/lm324-opera | Supplies |
| 30mm Crocodile Clip | 1 | 20.00 | 20.00 <u>h</u> | https://www.sparkpcb.com/development/30-mm-cn | Supplies |
| 40 pin Right Angle Male Headers | 4 | 15.00 | 60.00 <u>h</u> | https://www.sparkpcb.com/electronics/40-pin-right- | Supplies |
| 40 pin Female Headers | 5 | 9.00 | 45.00 _h | https://www.sparkpcb.com/electronics/40-pin-state | Supplies |
| 40 pin Male Headers | 5 | 7.00 | 35.00 <u>h</u> | https://www.sparkpcb.com/electronics/40-pin-state | Supplies |
| 4x4 Membrane Keypad | 1 | 79.00 | 79.00 <u>h</u> | nttps://www.sparkpcb.com/development/4x4-matrix | x Supplies |
| 1 Channel 5V Relay | 4 | 69.00 | 276.00 _h | https://www.sparkpcb.com/development/1-channel | Supplies |
| Dual Axis Joystick | 1 | 99.00 | 99.00 h | nttps://www.sparkpcb.com/development/dual-axis- | Supplies |
| 6x4 Inch Perfboard Circuit Board | 5 | 59.00 | 295.00 h | https://www.sparkpcb.com/electronics/prototyping/ | Supplies |
| 3x2 Inch Perfboard Circuit Board | 5 | 15.00 | 75.00 <u>h</u> | https://www.sparkpcb.com/electronics/prototyping/ | Supplies |
| Magnetic Reed Switch Glass Ampule | 5 | 39.00 | 195.00 h | https://www.sparkpcb.com/sensors/magnetic-read- | Supplies |
| Rotary Encoder Switch | 2 | 109.00 | 218.00 <u>h</u> | https://www.sparkpcb.com/electronics/rotary-encod | Supplies |
| | | | Subtotal 7 | 7,379.00 | |
| | | | | | |

Total

This is an approximate estimation, pending to more Notes: additions / deletions.

28,047.00