

# Parts Export

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Total Parts: 28

| Image                                                                               | Part Number    | Name               | Category               | Manufacturer                                                                         | Description                                                                                                                                                                                                                                                                                                                                                                             | Specification                                                                                                                                                                     | Tags                                                                                                 |
|-------------------------------------------------------------------------------------|----------------|--------------------|------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|    | EDR-00002-20K0 | Potentiometer      | ED - Electronic Device | Bourns, Panasonic, Alps Alpine                                                       | The 20K? Linear Potentiometer is a variable resistor used for adjustable resistance and voltage control in electronic circuits. It provides smooth analog output for voltage tuning, sensor calibration, audio control, and microcontroller inputs. It is widely used in embedded systems, control panels, test equipment, and educational electronics projects.                        | Resistance Value: 20K? Type: Linear Potentiometer Tolerance: ±10% (typical) Power Rating: 0.1W – 0.5W Rotation Angle: ~270°                                                       | Rotary Pot • Variable Resistor • potentiometer • 20K ohm pot • linear potentiometer • analog control |
|    | EDS-00004-A    | LM35 Sensor        | ED - Electronic Device | Texas Instruments, National Semiconductor, STMicroelectronics                        | The LM35 Temperature Sensor Module is an analog temperature sensor that provides a voltage output directly proportional to temperature in degrees Celsius. It offers accurate temperature measurement and easy interfacing with Arduino and other microcontrollers. It is widely used in weather stations, industrial control systems, robotics, IoT devices, and educational projects. | Sensor Type: Analog Temperature Sensor Output: Linear Analog Voltage (10mV/°C) Operating Voltage: 4V – 30V Temperature Range: 0°C to 100°C (typical)                              | Arduino Sensor • Temperature Sensor • analog sensor • LM35 • thermal sensor • IoT sensor             |
|    | EDT-00001-B    | Alcohol Gas Sensor | ED - Electronic Device | Hanwei Electronics, Winsen                                                           | The Alcohol Gas Sensor is a gas detection device used to detect alcohol vapors and ethanol concentration in the air. It provides an analog output proportional to gas levels and can be easily interfaced with Arduino, Raspberry Pi, and other microcontrollers. It is commonly used in breath analyzers, safety systems, industrial monitoring, and IoT projects.                     | Sensor Type: Alcohol / Ethanol Gas Sensor Target Gas: Ethanol (C2H5 OH), Alcohol Vapors Operating Voltage: 5V DC Warm: up Time: 20–48 hours (initial), few minutes per use        | alcohol sensor • Gas Detector • ethanol sensor • MQ-3 sensor • breath alcohol sensor                 |
|    | EDT-00001-C    | Methane Gas Sensor | ED - Electronic Device | Hanwei Electronics, Winsen, Figaro Engineering                                       | The Methane Gas Sensor is a gas detection device used to detect methane (CH4), CNG, and natural gas leaks. It provides an analog output proportional to gas concentration and can be easily interfaced with Arduino and other microcontrollers. It is widely used in gas leak detection, industrial safety, smart homes, and IoT monitoring systems.                                    | Sensor Type: Methane / CNG Gas Sensor Target Gas: CH4 (Methane), CNG, Natural Gas Operating Voltage: 5V DC Warm: up Time: 20–60 seconds Detection Range: ~200–10000 ppm (typical) | methane sensor • CNG sensor • MQ-4 sensor • gas leak detector • natural gas sensor                   |
|  | EDT-00001-E    | LPG Gas Sensor     | ED - Electronic Device | Hanwei Electronics, Winsen, Figaro Engineering                                       | The LPG Gas Sensor is a gas detection device used to detect LPG, butane, and propane gas leaks. It provides an analog output based on gas concentration and can be easily interfaced with Arduino and other microcontrollers. It is widely used in gas leak alarms, smart home safety systems, industrial monitoring, and IoT projects.                                                 | Sensor Type: LPG / Butane Gas Sensor Target Gas: LPG, Butane, Propane Operating Voltage: 5V DC Warm: up Time: 20–60 seconds Detection Range: ~200–10000 ppm (typical)             | LPG Sensor • Propane Sensor • Butane Sensor • gas leak detector • MQ-6 sensor                        |
|  | EDT-00002-A    | LDR Module         | ED - Electronic Device | Advanced Photonix, Token Electronics, Excellitas Technologies, Luna Optoelectronics  | The LDR (Light Dependent Resistor) is a light-sensitive component whose resistance varies with light intensity. Its resistance decreases in bright light and increases in darkness. It is widely used in automatic lighting systems, light meters, solar trackers, security devices, and electronics projects for light detection and control.                                          | Operating Voltage: 3.3V – 5V Sensor Type: Light Dependent Resistor Output Type: Analog Resistance Output Resistance Range: 200? – 1M ?                                            | Light Sensor • analog sensor • LDR sensor • photoresistor • light dependent resistor                 |
|  | EDT-00003-A    | Piezo Sensor       | ED - Electronic Device | Murata Manufacturing, SparkFun Electronics, Measurement Specialties, TE Connectivity | The Piezoelectric Ceramic Vibration Sensor is an analog sensor used to detect vibration, knocks, impacts, touch, and pressure. It generates a voltage through the piezoelectric effect when mechanical force is applied. The sensor is widely used in vibration monitoring, touch sensing, security systems, musical instruments, and Arduino-based projects.                           | Operating Voltage: 3.3V – 5V Output Type: Analog Voltage Output Sensor Type: Piezoelectric Ceramic Frequency Range: 1Hz – 10KHz                                                   | Knock Sensor • piezoelectric sensor • vibration sensor • analog sensor • ceramic sensor              |

| Image                                                                               | Part Number | Name                 | Category                           | Manufacturer                                                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                     | Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Tags                                                                                                                                                                           |
|-------------------------------------------------------------------------------------|-------------|----------------------|------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | EMS-00001-A | MQ-2 Gas Sensor      | EM - Electronic-Electrical Modules | Hanwei Electronics Group Corporation, Zhengzhou Winsen Electronics Technology Co., Ltd. | The MQ-2 Gas Sensor Module detects combustible gases such as LPG, methane, hydrogen, alcohol vapor, and smoke. It uses a SnO <sub>2</sub> sensing element and provides both analog and digital outputs with adjustable sensitivity. Ideal for gas leakage detection, safety systems, fire alarms, environmental monitoring, smart home applications, and Arduino-based electronics projects.                    | Sensor Model: MQ-2 Detection Range: 300 – 10,000 ppm Detectable Gases: LPG, Butane, Propane, Methane (CH <sub>4</sub> ), Hydrogen (H <sub>2</sub> ), Alcohol, Smoke, CO Sensing Material: Tin Dioxide (SnO <sub>2</sub> ) Operating Voltage: 5V DC Digital Output Voltage: 0V or 5V (TTL Logic) Analog Output: Yes Sensitivity Adjustment: Onboard Potentiometer Preheat Time: 20 seconds (minimum) Dimensions (mm): 36 × 20 × 21 Weight (g): 8 Shipping Weight: 0.012 kg Shipping Dimensions (cm): 4 × 4 × 4 | Arduino Compatible • MQ-2 Sensor • LPG Gas Sensor • Smoke Detector • SnO <sub>2</sub> Sensor • Combustible Gas Module • 5V Gas Sensor • Gas Leakage Detector                   |
|    | EMS-00003-C | Accelerometer module | EM - Electronic-Electrical Modules | Freescale Semiconductor, DFRobot, Elecrow                                               | The MMA7361 Accelerometer Module is a low-power 3-axis analog accelerometer used to measure acceleration, tilt, vibration, orientation, and motion along the X, Y, and Z axes. Based on the Freescale/NXP MMA7361L MEMS sensor, it provides analog voltage outputs proportional to acceleration values. It is widely used in robotics, motion tracking, gaming devices, and Arduino-based projects.             | Product Type: 3-Axis Accelerometer Module Model: MMA7361L Sensor Type: MEMS Accelerometer Axes: X, Y, Z Operating Voltage: 3.3V – 5V DC                                                                                                                                                                                                                                                                                                                                                                       | Tilt Sensor Module • MMA7361 Accelerometer • Triple Axis Accelerometer • 3-Axis Accelerometer Module                                                                           |
|    | EMS-00004-B | Sound Detector       | EM - Electronic-Electrical Modules | Keyes Electronics, DFRobot, AZDelivery                                                  | The Sound Detector Module (Blue) is a microphone-based sensor used to detect surrounding sounds and convert them into electrical signals. It typically combines an electret microphone with an LM393 comparator to provide both analog and digital outputs. The module is widely used in sound-activated switches, noise monitoring, voice-triggered systems, robotics, automation, and Arduino-based projects. | Product Type: Sound Detection Sensor Model: KY-038 / KY-037 Main IC: LM393 Comparator Operating Voltage: 3.3V – 5V DC                                                                                                                                                                                                                                                                                                                                                                                         | Sound Detector Module • KY-038 Sound Sensor • LM393 Sound Sensor • Microphone Sensor Module                                                                                    |
|    | EMS-00004-C | Microphone Module    | EM - Electronic-Electrical Modules | Analog Devices / Maxim Integrated, SparkFun, DFRobot, Keyestudio                        | The MAX4466 Electret Microphone Module is a low-noise sound sensor with an inbuilt amplifier for detecting and monitoring audio signals. It uses an electret microphone with the MAX4466 op-amp to provide clear analog output. It is commonly used in voice detection, sound level monitoring, robotics, and Arduino/ESP32 projects.                                                                           | Product Type: Electret Microphone Module Main IC: MAX4466 Output Type: Analog Operating Voltage: 2.4V – 5.5V DC                                                                                                                                                                                                                                                                                                                                                                                               | MAX4466 Microphone Module • Electret Microphone Amplifier • Sound Sensor Module • Audio Detection Sensor                                                                       |
|    | EMS-00008-A | Metal Touch Sensor   | EM - Electronic-Electrical Modules | Keyes Electronics, Generic Electronics, Keyestudio                                      | The KY-036 Metal Touch Sensor Module is used to detect touch from a human finger or conductive object by sensing changes in conductivity. It uses an LM393 comparator and a transistor-based circuit to provide analog and digital outputs. It is commonly used in touch switches, security systems, automation, and Arduino projects.                                                                          | Product Type: Metal Touch Sensor Module Model: KY-036 Main IC: LM393 Comparator Operating Voltage: 3.3V – 5V DC                                                                                                                                                                                                                                                                                                                                                                                               | KY-036 Metal Touch Sensor • Human Body Touch Sensor • Metal Touch Module • Touch Detection Sensor                                                                              |
|  | EMS-00009-A | Heart Pulse Sensor   | EM - Electronic-Electrical Modules | Maxim Integrated, Generic Electronics, SparkFun, DFRobot                                | The Heart Pulse Rate Sensor is a biometric sensor used to detect heartbeats and measure pulse rate in BPM. It works using Photoplethysmography (PPG), where light is emitted into the skin and changes in reflected light due to blood flow are detected. It is used in health monitoring, fitness devices, and Arduino projects.                                                                               | Product Type: Heart Pulse Rate Sensor Sensor Type: Photoplethysmography (PPG) Operating Voltage: 3.3V – 5V DC Output Type: Analog / I2C Measured Parameter: Pulse Rate (BPM)                                                                                                                                                                                                                                                                                                                                  | Heart Pulse Sensor • Pulse Rate Sensor • Heartbeat Sensor Module • Pulse Detection Sensor • Arduino Pulse Sensor • BPM Sensor • Heart Rate Monitor Sensor • Pulse Sensor Amped |
|  | EMS-00010-A | Smoke Gas Sensor     | EM - Electronic-Electrical Modules | Hanwei Electronics, Winsen Electronics, SparkFun Electronics, DFRobot                   | The MQ-2 Gas Sensor Module is used to detect combustible gases like LPG, methane, propane, hydrogen, alcohol, and smoke. It works using an SnO <sub>2</sub> sensing layer that changes resistance when gas is present. It provides analog and digital outputs and is commonly used in gas leak detection, safety systems, air quality monitoring, and Arduino projects.                                         | Product Type: Gas & Smoke Sensor Model: MQ-2 Detectable Gases: LPG, Methane, Butane, Smoke Detection Range: 200 – 10000 ppm Operating Voltage: 5V DC                                                                                                                                                                                                                                                                                                                                                          | LPG Gas Sensor • methane sensor • Arduino Gas Sensor • MQ-2 Gas Sensor • Smoke Sensor Module • Butane Gas Detector • MQ2 Smoke Detector • Flammable Gas Sensor                 |
| No Image                                                                            | EMS-00010-B | MQ-3 Sensor          | EM - Electronic-Electrical Modules | Hanwei Electronics, Winsen Electronics, Waveshare                                       | The MQ-3 Alcohol Gas Sensor Module is used to detect alcohol concentration in the air. It provides analog and digital outputs based on gas levels. It is widely used in breath analyzers, safety systems, and IoT monitoring applications.                                                                                                                                                                      | Operating Voltage (V): 2.5 to 5 Additional Specs: Output Pin: Analog and digital, Gold pin connectors, 2.54 mm pitch, Boost Converter Chip: PT1301 Board Size (mm): 40 x 21 mm Mounting Hole Diameter (mm): 2 mm Interface: Digital Output, Analog output, VCC Positive power supply (2.5V-5.0V), Power ground                                                                                                                                                                                                | arduino • alcohol sensor • MQ-3 • gas sensor • ethanol detector                                                                                                                |

| Image                                                                               | Part Number | Name                 | Category                           | Manufacturer                                                               | Description                                                                                                                                                                                                                                                                                                                                                                                    | Specification                                                                                                                                                                                                                                                                                                                                                                                                                                          | Tags                                                                                                                                                                      |
|-------------------------------------------------------------------------------------|-------------|----------------------|------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | EMS-00010-C | MQ-4 Gas Sensor      | EM - Electronic-Electrical Modules | Hanwei Electronics, Winsen Electronics, Waveshare                          | The MQ-4 Gas Sensor Module is used to detect methane (CH <sub>4</sub> ), CNG, and natural gas leaks. It provides analog and adjustable digital outputs for gas detection. It is widely used in gas leakage alarms, safety systems, and IoT monitoring applications.                                                                                                                            | Model: MQ-4 Detecting range: 200 to 10000 ppm Operating Voltage: 3 ~ 5 V Length: 3.1 cm Height: 2.1 cm Width: 1.9 cm                                                                                                                                                                                                                                                                                                                                   | Arduino Compatible • gas sensor • MQ-4 • methane sensor • CNG detector                                                                                                    |
| No Image                                                                            | EMS-00010-D | MQ-5 Gas Sensor      | EM - Electronic-Electrical Modules | Hanwei Electronics, Winsen Electronics, Waveshare                          | The MQ-5 Gas Sensor Module is used to detect combustible gases like LPG, methane, and natural gas. It changes conductivity based on gas presence and provides an analog output signal. It is widely used in gas leakage detection, safety systems, and IoT projects.                                                                                                                           | Model: MQ-5 Operating Temperature Range: -20 to 40 °C Operating Voltage: 5 V Length: 3.2 cm Height: 2.2 cm Width: 2 cm                                                                                                                                                                                                                                                                                                                                 | Arduino Compatible • gas sensor • methane sensor • CNG detector • CH4 sensor                                                                                              |
|    | EMS-00010-E | MQ-6 LPG Gas Sensor  | EM - Electronic-Electrical Modules | Hanwei Electronics, Zhengzhou Winsen Electronics, DFRobot                  | The MQ-6 Gas Sensor Module is used to detect LPG, propane, and butane gas leaks in the air. It changes conductivity based on gas concentration and provides an analog output signal. It is widely used in gas leakage detection, safety systems, and IoT projects.                                                                                                                             | Model: MQ-6 Operating Temperature Range: -20 to 40 °C Operating Voltage: 5 V Length: 3.2 cm Height: 2.2 cm Width: 2 cm                                                                                                                                                                                                                                                                                                                                 | arduino • gas sensor • methane sensor • MQ6 • LPG Sensor • Propane Sensor • Butane Sensor                                                                                 |
|    | EMS-00010-F | MQ-7 Sensor          | EM - Electronic-Electrical Modules | Hanwei Electronics, Zhengzhou Winsen Electronics, DFRobot                  | The MQ-7 Carbon Monoxide Sensor Module is a gas sensor used to detect carbon monoxide (CO) in the air. It measures changes in conductivity to provide analog and digital outputs. It is widely used in safety systems, air quality monitoring, and IoT projects.                                                                                                                               | Model: MQ-7 Ambient temperature: -20 ~ + 50 °C Characteristic gas: 100 ppm CO Heating current: ? 180 mA Heating power: approx. 350 mW Heating resistance: ± 31 ? Heating voltage: 5.0V ± 2V / 1.5 ± 1V Humidity: ? 95% RH Operating Voltage: 5 V Oxygen content: 21%. Range: 10 ~ 1000 ppm Return time: ? 30 s Sensitivity: ? 3%. Length: 3.5 cm Height: 1.1 cm Width: 2 cm                                                                            | arduino • MQ7 • Carbon Monoxide Sensor • CO Sensor • Gas Detector • Air Quality Sensor                                                                                    |
| No Image                                                                            | EMS-00010-G | MQ-135 Sensor        | EM - Electronic-Electrical Modules | Hanwei Electronics, Zhengzhou Winsen Electronics, Futurlec                 | The MQ-135 Air Quality Sensor Module is used to detect harmful gases and monitor air pollution levels. It changes its conductivity based on gas concentration and provides an analog output. It is sensitive to gases like ammonia, benzene, smoke, and other pollutants. It is widely used in air quality monitoring, IoT systems, and environmental safety projects.                         | Model: MQ-135 Detecting range: 100ppm to 1000ppm Operating current: 150 mA Operating Voltage: 5 V Length: 3.2 cm Height: 2.7 cm Width: 2 cm                                                                                                                                                                                                                                                                                                            | Air Quality Sensor • MQ135 • Ammonia Sensor • NOx Sensor • CO2 Sensor • Smoke Sensor                                                                                      |
|    | EMS-00010-H | Hydrogen Sensor      | EM - Electronic-Electrical Modules | SparkFun Electronics, Hanwei Electronics, Winsen Electronics, SparkFun     | The MQ-8 Hydrogen Gas Sensor is a semiconductor sensor used to detect hydrogen (H <sub>2</sub> ) gas in the range of 100 ppm to 10,000 ppm. It works using a SnO <sub>2</sub> sensing layer that changes resistance when exposed to hydrogen. It provides analog and digital outputs and is used in safety systems, gas monitoring, and Arduino/ESP32 projects.                                | Product Type: Hydrogen Gas Sensor Model: MQ-8 SparkFun SKU: SEN-10916 Detectable Gas: Hydrogen (H <sub>2</sub> ) Detection Range: 100 – 10,000 ppm Operating Voltage: 5V DC                                                                                                                                                                                                                                                                            | MQ-8 Gas Sensor • Hydrogen Gas Sensor • H2 Gas Detector • MQ8 Sensor Module • Hydrogen Detection Sensor • Arduino Gas Sensor • ESP32 Hydrogen Sensor • Gas Leakage Sensor |
|  | EMS-00018-A | Water Level Sensor   | EM - Electronic-Electrical Modules | Generic Electronics, Generic Electronics, DFRobot, SparkFun                | Water Level Sensor Module is used to detect water levels in tanks, containers, and irrigation systems. It works using conductive tracks that change resistance when in contact with water. It provides analog output for level measurement and digital output for threshold-based detection. It is commonly used in smart irrigation, tank monitoring, and leak detection systems.             | Product Type: Water Level Sensor Module Sensor Type: Conductive Water Sensor Operating Voltage: 3.3V – 5V DC Comparator IC: LM393                                                                                                                                                                                                                                                                                                                      | Water Detection Sensor • Water Level Sensor • Liquid Level Sensor • Analog Water Sensor • Arduino Water Sensor • Level Detection Module • Tank Level Sensor               |
|  | EMS-00019-A | Soil Moisture Sensor | EM - Electronic-Electrical Modules | Sensor Probe Manufacturer, Comparator Module Manufacturer, IC Manufacturer | The Soil Moisture Sensor Module (YL-69 + FC-28) measures water content in soil using resistive sensing technology. It provides both analog (AO) and digital (DO) outputs, with adjustable sensitivity through an onboard LM393 comparator. Ideal for smart irrigation systems, plant monitoring, Arduino projects, greenhouse automation, and IoT-based environmental monitoring applications. | Sensor Type: Resistive Soil Moisture Sensor Operating Voltage: 3.3V – 5V DC Output Type: Analog (AO) and Digital (DO) Digital Output: 0 or 1 (TTL Logic) Measurement Principle: Resistance-based conductivity measurement Sensitivity Adjustment: Onboard Potentiometer (for digital threshold) Probe Dimension: Approx. 6 cm × 3 cm Cable Length: 20 cm Interface Pins: VCC, GND, DO, AO Shipping Weight: 0.02 kg Shipping Dimensions (cm): 8 × 6 × 3 | Arduino Compatible • Soil Moisture Sensor • YL-69 • FC-28 • LM393 • Resistive Soil Sensor • Irrigation Sensor                                                             |

| Image                                                                             | Part Number | Name                | Category                           | Manufacturer                                                    | Description                                                                                                                                                                                                                                                                                                                                                                             | Specification                                                                                                                                                                                                                                                                                                                                                                                                 | Tags                                                                                                                                                      |
|-----------------------------------------------------------------------------------|-------------|---------------------|------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | EMS-00020-A | Joystick Module     | EM - Electronic-Electrical Modules | EM Series / Generic Compatible, KEYESTUDIO, SunFounder, DFRobot | Dual-axis analog joystick module for detecting X and Y movement positions. Each axis uses a 10K $\Omega$ potentiometer to provide a 0–5V analog output proportional to joystick position. Includes a built-in push-button switch for additional input functionality. Ideal for robotics, gaming controllers, Arduino projects, remote control systems, and motion control applications. | Model: PS2 Joystick Module Operating Voltage (VDC): 5V Potentiometer Resistance: 10K $\Omega$ (per axis) X/Y Output: Analog (0–5V) Button: Digital (Press-Down) Interface Type: 2.54 mm Pin Header PCB Size (mm): 34 × 32 Compatibility: Arduino / Raspberry Pi / Microcontrollers Lifespan: Long-Life, High-Stability Potentiometers Shipping Weight: 0.015 kg Shipping Dimensions (L × W × H): 6 × 5 × 4 cm | PS2 Joystick • Analog Joystick Module • Dual Axis Sensor • 10K Potentiometer Joystick • Arduino Joystick                                                  |
|  | EMS-00022-A | Analog Piezo Module | EM - Electronic-Electrical Modules | Generic Electronics, DFRobot, SparkFun, Adafruit                | The Analog Piezoelectric Vibration Module uses a ceramic disc to detect vibrations, knocks, and mechanical stress. It generates an analog voltage based on the strength of the vibration using the piezoelectric effect. Unlike digital sensors, it measures vibration intensity, making it useful for Arduino projects, touch sensing, impact detection, and monitoring applications.  | Product Type: Analog Vibration Sensor Module Sensing Element: Piezoelectric Ceramic Disc Output Type: Analog Voltage Output Operating Voltage: 3.3V – 5V DC Operating Current: < 1 mA                                                                                                                                                                                                                         | Shock Sensor • Piezo Vibration Sensor • Analog Piezo Module • Ceramic Vibration Sensor • Knock Sensor • Arduino Piezo Sensor • Vibration Detection Module |
|  | EMS-00024-A | Rain Sensor Module  | EM - Electronic-Electrical Modules | Generic Electronics, DFRobot, SparkFun                          | Rain Sensor Modules detect rain, water droplets, and moisture for applications like weather monitoring, smart irrigation, robotics, and Arduino projects. They include a sensor plate and LM393 module, providing analog and digital outputs for accurate and adjustable detection.                                                                                                     | Product Type: Rain Detection Sensor Module Operating Voltage: 3.3V – 5V DC Comparator IC: LM393 Sensitivity Adjustment: Potentiometer Compatible Boards: Arduino, ESP32, Raspberry Pi                                                                                                                                                                                                                         | Rain Sensor Module • Rain Drop Sensor • FC-37 Sensor • YL-83 Rain Module • Water Detection Sensor • Arduino Rain Sensor • Weather Sensor                  |
| No Image                                                                          | EMX-00002-A | Arduino nano        | EM - Electronic-Electrical Modules | Arduino, Gravitech, RobotDyn, Keyestudio, DFRobot               | The Arduino Nano is a compact microcontroller board based on the ATmega328. It offers digital and analog I/O in a small breadboard-friendly form factor. It is widely used in embedded systems, robotics, IoT projects, and educational electronics.                                                                                                                                    | Microcontroller: ATmega328 Flash Memory: 32 KB (ATmega328) of which 2 KB used by bootloader SRAM: 1 KB or 2KB EEPROM: 512 bytes (ATmega168) or 1 KB (ATmega328) Clock Speed: 16 MHz Digital I/O Pins: 14 (of which 6 provide PWM output) Analog Input Pins: 8 DC Current per I/O Pin: 40 mA Operating Voltage: 5V Input Voltage: 7 - 12 V (5V model)                                                          | ATmega328P • Arduino Nano • Microcontroller Board • Development Board • IoT                                                                               |
| No Image                                                                          | EMX-00003-A | Arduino Mega        | EM - Electronic-Electrical Modules | Arduino, Elegoo, RobotDyn, Keyestudio, DFRobot, Waveshare       | The Arduino Mega 2560 is a microcontroller board based on the ATmega2560. It offers 54 digital I/O pins, 16 analog inputs, multiple serial ports, and is designed for complex projects requiring high I/O and memory. It is widely used in robotics, automation, IoT systems, and large-scale embedded applications.                                                                    | Microcontroller Chip: ATmega2560 Analog I/O Pins: 16 Digital I/O Pins: 54 (of which 14 provide PWM output) Flash Memory: 256 KB of which 8 KB used by bootloader SRAM: 8 KB EEPROM: 4 KB DC Current per I/O Pin: 40 mA DC Current for 3.3V Pin: DC Current for 3.3V Pin Operating Voltage: 5V Input Voltage: 7V to 12V Input Voltage (limit): 6V-20V                                                          | Development Board • Arduino Mega • ATmega2560 • Embedded Systems • IoT Board                                                                              |