

# Parts Export

Generated: 2026-06-10 09:08:51

Total Parts: 96

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	COC-00001-A	Binding Tape	CO - Consumables	Dowell, 3M, Advance Tapes, Deta Electrical	The Insulation Filament Tape (25mm x 50m) is a high-strength, durable tape designed for a variety of applications. Made with reinforced fiberglass filaments, it offers excellent tensile strength and resistance to tearing. This tape is ideal for bundling, reinforcing, and securing heavy packages. Its strong adhesive backing ensures reliable performance on a range of surfaces. Heat-resistant and non-conductive, it is suitable for electrical insulation tasks. Perfect for industrial, commercial, and DIY use, it combines strength and versatility in one compact roll.	Operating Temperature: -18°C to +105°C Voltage Rating: Up to 600V Thickness: 0.178mm Flame Retardant: Yes	PVC Tape • Electrical Tape • Binding Tape • Insulation Tape • Cable Tape • Wire Management • Electronics Tape
No Image	COC-00001-B	Foam Tape	CO - Consumables	3M, Tesa, Nitto Denko, Avery Dennison, Hi-Bond	The EVA Foam Tape Roll (50mm x 6mm) is a durable and versatile adhesive solution designed for a wide range of applications. With its strong adhesion and soft cushioning, it effectively absorbs vibrations and reduces noise, making it ideal for sealing gaps, mounting, or insulating. The weather-resistant foam is perfect for both indoor and outdoor use, providing long-lasting performance in varying conditions. Its 50mm width and 6mm thickness offer optimal coverage and support for heavy-duty tasks. Easy to cut and apply, this tape ensures a secure and reliable bond on various surfaces. Perfect for DIY projects, automotive work, and professional installations.	Color: Black Thickness: 6mm Material: EVA Foam Length: 5 Meter Width: 50mm	Foam Tape • Double Sided Tape • EVA Foam Tape • PE Foam Tape • Acrylic Foam Tape
No Image	COC-00001-C	Masking Tape	CO - Consumables	Avery Dennison, Advance Tapes, Shurtape, Intertape Polymer Group	The Masking Tape Roll 20mm   20 mtr is a versatile adhesive tape designed for a wide range of applications. With a width of 20mm and a length of 20 meters, it provides ample coverage for precise and clean masking. Ideal for painting, crafting, and general-purpose tasks, it ensures easy application and residue-free removal. The tape offers reliable adhesion to various surfaces like wood, metal, and glass. Its tear-resistant design allows for smooth handling, while the durable material withstands light moisture and heat. A must-have tool for DIY projects and professional use alike!	Tape Type: Pressure Sensitive Masking Tape Material: Crepe Paper Width: 12mm – 48mm Length: 10m – 50m Temperature Resistance: Up to 80°C	Electronics Tape • Masking Tape • Paper Tape • Crepe Tape • Painting Tape • PCB Masking
No Image	COC-00001-D	Insulation Tape	CO - Consumables	3M, Generic / OEM	Black PVC insulation tape designed for electrical insulation, wire repair, cable bundling, and protection of electrical connections. Made from flexible, stretchable vinyl material with strong adhesion and resistance to heat, moisture, abrasion, and weather conditions. Suitable for indoor and outdoor applications. Ideal for electricians, technicians, and DIY users requiring safe and reliable electrical insulation.	Item Type: Insulation Tape Material: PVC Color: Black Length (mm): 55 Width (mm): 55 Height (mm): 20 Weight: 35 g Shipping Weight: 0.04 kg Shipping Dimensions: 6 x 6 x 3 cm	PVC Tape • Electrical Tape • Black Insulation Tape • Flame Retardant • Wire Wrapping
No Image	COE-00001-A	9V DC Battery	CO - Consumables	Duracell, Energizer, Panasonic	This is general 9v Battery for all your project and application needs. Whether you need a new battery for your applications like a Flashlight, Portable Phone Charger, Wireless doorbell, Wireless audio transmitter-receiver systems or your kid's toys, etc. or even if you are looking for a long-lasting, reliable option for your sensor devices like a smoke detector, everyone needs a good 9-volt battery every once in a while. It's also a great idea to keep extra 9 volt batteries around in case of an emergency. That's why we've found one of the best 9-volt battery available.	Nominal Capacity (mAh): 400-500 Nominal Voltage (V): 9 Compatibility: Toys, Smoke Alarms, Transistors Length (mm): 25 Width (mm): 15 Weight (g): 36	9V Battery • DC Battery • Alkaline Battery • NiMH Battery • Power Supply • Battery Pack
No Image	COE-00001-B	Battery	CO - Consumables	Duracell, Energizer, Panasonic, Sony	Standard AA battery used for powering electronic devices, embedded systems, toys, sensors, remote controls, robotics, and portable equipment. It provides reliable portable power with stable voltage output and is widely used in consumer electronics, educational kits, IoT devices, and DIY electronics projects.	Battery Type: AA Cylindrical Battery Output Voltage: 1.5V Chemistry: Alkaline / NiMH / Lithium Capacity: 1800mAh – 3000mAh Diameter: 14.5mm Length: 50.5mm	Alkaline Battery • AA battery • cylindrical battery • rechargeable battery • portable power • battery cell

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No Image	<b>COE-00001-C</b>	CR2025 3V Lithium Coin Cell	CO - Consumables	Panasonic	.Panasonic CR2025 is a 3V lithium coin cell battery designed for long-lasting and reliable power in compact electronic devices.&nbsp;Built using Lithium Manganese Dioxide (LiMnO?) chemistry, it offers stable discharge characteristics and a shelf life of up to 10 years under proper storage conditions.&nbsp;Suitable for car key remotes, medical devices, digital watches, calculators, fitness devices, memory backup systems, and other small electronics.	Battery Type: Lithium Coin Cell Battery Size: CR2025 Chemistry: Lithium Manganese Dioxide (LiMnO?) Nominal Voltage: 3 V Nominal Capacity: 165 mAh Diameter: 20 mm Height: 2.5 mm Termination Style: Pressure Contacts Operating Temperature: -30°C to +60°C Weight (Unit): 2.3 g Shipping Weight: 0.008 kg Shipping Dimensions: 9.2 x 7.5 x 1 cm	CR2025 Battery • 3V Coin Cell • Lithium Battery • Panasonic Battery • Button Cell
No Image	<b>COM-00001-A</b>	3D Filament	CO - Consumables	Creality, eSUN, Hatchbox	High-quality 1.75mm white 3D printing filament designed for FDM/FFF 3D printers used in prototyping, educational models, robotics, product design, and engineering applications. It provides smooth extrusion, reliable layer adhesion, low warping, and consistent print quality for detailed prints and structural models.	Filament Type: PLA / ABS / PETG Filament Diameter: 1.75mm Color: White Spool Weight: 1kg Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C	3D filament • PLA filament • white filament • 1.75mm filament • FDM filament • 3D printer material
No Image	<b>COM-00001-B</b>	3D Filament	CO - Consumables	Creality, eSUN, Hatchbox	High-quality 1.75mm black 3D printing filament designed for FDM/FFF 3D printers used in prototyping, robotics, engineering models, product design, and fabrication applications. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for detailed and durable prints.	Filament Type: PLA / ABS / PETG Filament Diameter: 1.75mm Color: Black Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C	3D filament • PLA filament • 1.75mm filament • FDM filament • 3D printer material • black filament
No Image	<b>COM-00001-C</b>	3D Filament	CO - Consumables	Creality, eSUN, Hatchbox	High-quality 1.75mm yellow 3D printing filament designed for FDM/FFF 3D printers used in prototyping, educational models, robotics, engineering applications, and creative fabrication projects. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for accurate and durable printed parts.	Filament Type: PLA / ABS / PETG Filament Diameter: 1.75mm Color: Yellow Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C	3D filament • PLA filament • 1.75mm filament • FDM filament • 3D printer material • yellow filament
No Image	<b>COM-00001-D</b>	3D Filament	CO - Consumables	Creality, eSUN, Hatchbox	High-quality 1.75mm blue 3D printing filament designed for FDM/FFF 3D printers used in prototyping, robotics, engineering models, educational projects, and creative fabrication applications. It provides smooth extrusion, strong layer adhesion, low warping, and consistent print quality for durable and accurate printed parts. Commonly used in electronics enclosures, robotic components, mechanical prototypes, DIY fabrication, and industrial product development.	Filament Type: PLA / ABS / PETG Filament Diameter: 1.75mm Color: Blue Printing Temperature: 190°C – 220°C Heated Bed Temperature: 0°C – 60°C	3D filament • PLA filament • 1.75mm filament • FDM filament • 3D printer material • blue filament
No Image	<b>EDD-00001-A</b>	Laser Diode	ED - Electronic Device	OSRAM, Sharp, Rohm, Mitsubishi, Generic	Mini 650nm 6mm 5mW Laser Dot Diode Module which is made of copper plastic. Can be driven from 3V to 5V DC so they're great for your embedded electronics project, robot, or other application. You require a 3 to 5VDC power supply which you'd get from two standard AAA or AA batteries. These diodes are 5mW output and have a safety label marked on them. It is suitable for 3V 5mW standard, with 6mm outside diameter, can be used to connect diode tubes for multiple uses.	Item Type: Laser Module Voltage Rating (V): 5 Weight (g): 2 Operating Temperature (°C): -10 to 50 Rated Power (mW): 5mW Wavelength (nm): 650	laser diode • laser • light emitter • optical • semiconductor • electronic device
No Image	<b>EDD-00004-A</b>	1 Digit 7-Segment LED Display	ED - Electronic Device	Lite-On Technology, Kingbright, Generic / OEM	The 0.56"rdquo; 1-Digit 7-Segment LED Display is designed to display decimal numbers (0&ndash;9) using seven LED segments. It features a common cathode configuration with bright red LEDs for clear and efficient numeric indication. Ideal for digital clocks, counters, meters, and microcontroller-based display applications.	Model: 7 Segment LED Display Digit Count: 1 Digit Display Size: 0.56 Inch Configuration Type: Common Cathode Emitting Color: Red Face Color: Black Number of Pins: 10 Forward Voltage (V): 1.8 – 2.2 (Typical for Red LED) Forward Current (mA): 20 (Typical) Mounting Type: PCB Through Hole Characteristics: High Brightness, Low Current Consumption, Easy to Use Length (Inch): 0.56 Shipping Weight: 0.02 kg Shipping Dimensions (L x W x H cm): 6 x 4 x 2	Arduino Compatible • 0.56" 7-Segment • 1 Digit Display • Red LED • Common Cathode • 5161AS • Through Hole • Numeric Display
No Image	<b>EDD-00004-B</b>	7 Segment Display, 1 digit device	ED - Electronic Device	Kingbright, Lite-On, Everlight, Broadcom	Single digit common anode 7 segment LED display device designed for numeric indication in embedded systems, counters, timers, clocks, measurement instruments, and electronics projects. It provides bright numeric visualization with low power consumption and simple interfacing using microcontrollers and digital logic circuits. Commonly used in Arduino projects, digital counters, calculators, industrial control panels, and educational electronics applications.	Display Type: 1 Digit 7 Segment LED Display Configuration: Common Anode Operating Voltage: 1.8V – 2.2V per Segment Number of Pins: 10 Pins Digit Height: 0.36 Inch – 0.56 Inch	Numeric Display • 7 segment display • common anode display • single digit display • LED display

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No Image	<b>EDD-00005-B</b>	12Volt regulator	ED - Electronic Device	Texas Instruments, STMicroelectronics, ON Semiconductor, Fairchild Semiconductor	LM7812 TO-92 voltage regulator device designed to provide stable 12V DC output for electronic circuits, embedded systems, communication modules, and power supply applications. It regulates higher input voltage into a constant 12V output with built-in thermal overload and short-circuit protection for reliable operation. Commonly used in power management circuits, robotics systems, Arduino projects, industrial electronics, and educational embedded applications.	Device Type: Linear Voltage Regulator Output Voltage: 12V DC Package Type: TO-92 Input Voltage Range: 14V – 30V Output Current: Up to 100mA	voltage regulator • TO-92 regulator • linear regulator • power supply IC • LM7812 • 12V regulator
No Image	<b>EDK-00001-A</b>	Electrolytic capacitor	ED - Electronic Device	Nichicon, Panasonic, Rubycon, Nippon Chemi-Con	Electrolytic capacitor designed for energy storage, filtering, voltage smoothing, signal coupling, and power supply stabilization in electronic circuits and embedded systems. It provides high capacitance values with polarized construction for efficient performance in DC power applications and low-frequency filtering circuits. Commonly used in power supplies, amplifiers, Arduino projects, motor drivers, industrial electronics, and embedded development systems.	Capacitor Type: Aluminum Electrolytic Capacitor Capacitance Range: 1µF – 10000µF Voltage Rating: 6.3V – 450V Operating Temperature: -40°C to +105°C	electrolytic capacitor • aluminum capacitor • polarized capacitor • filtering capacitor
No Image	<b>EDM-00001-A</b>	Tactile Push Button Switch	ED - Electronic Device	OMRON, E-Switch	12x12x7.3mm tactile push button switches with momentary ON-OFF operation. Rated for 12V DC and 120mA with responsive tactile feedback. Includes 25 color-coded round keycaps and storage box for prototyping and DIY projects.	Item Type: Micro Switch Model: Tactile Push Button Switch Operation Mode: ON-OFF Contact Type: Momentary Current Rating: 120mA Operating Voltage: 12V DC Switch Type: Push Button Material: Metal and Plastic Mounting Type: Surface Mount Button Size (mm): 12x12x7.3 Operating Temperature (°C): -25 to +70 Lifespan: ~1000 Cycles Box Dimensions (mm): 127.1 x 68.3 x 21.9 Weight (g): 55 Shipping Weight: 0.06 kg Shipping Dimensions (L x W x H): 13 x 7 x 3 cm	Tactile Switch • Push Button • 12x12mm Switch • Momentary Switch • Arduino Button Kit
No Image	<b>EDR-00001-100Z</b>	Resistor - 100 Ohm	ED - Electronic Device	Yageo, Vishay, KOA Speer, TE Connectivity, Generic	1. 100 ohm Carbon Film Resistors are typical axial-lead resistors, which have much better temperature stability and provide lower noise, and are generally better for high frequency or radiofrequency applications. 2. We made it available in the form of a bunch of different values as required for the project to provide convenience, so you need not find a differently required value resistor at different places while working on your project.	Series: – Resistance (Ohm): 100 Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 – 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm	resistor • 100ohm • carbon film • passive component
No Image	<b>EDR-00001-10K0</b>	Resistor - 10K Ohm	ED - Electronic Device	Yageo, Vishay, KOA Speer, TE Connectivity, Generic	1. 10K/100? Carbon Film Resistors are typical axial-lead resistors that offer good temperature stability and low noise performance. They are suitable for general-purpose electronic circuits, including high-frequency and RF applications. 2. These resistors are available in multiple values for project flexibility, eliminating the need to source different resistor values separately.	Power: 1/4 W Resistance: 100 ? Resistance Tolerance: 5% Type: Carbon Film Resistors	Through Hole • carbon film • 10k resistor • 0.25w • passive • axial
No Image	<b>EDR-00001-1K00</b>	Resistor - 1K Ohm	ED - Electronic Device	Yageo, Vishay, KOA Speer, TE Connectivity, Generic	1K ohm Carbon Film Resistors are typical axial-lead resistors, which have much better temperature stability and provide lower noise, and are generally better for high frequency or radiofrequency applications.	Series: – Resistance (Ohm): 1k Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 – 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm	carbon film • 0.25w • passive • 1k resistor
No Image	<b>EDR-00001-1M00</b>	Resistor - 1M Ohm	ED - Electronic Device	Yageo, Vishay, KOA Speer, TE Connectivity, Generic	It is a 1M Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications.	Series: - Resistance (Ohm): 1M Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 – 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 x 1 x 1 cm	0.25w • passive • 1m resistor • metal film

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No Image	<b>EDR-00001-220Z</b>	Resistor - 220 Ohm	ED - Electronic Device	Yageo, Vishay, KOA Speer, TE Connectivity, Generic	It is a 220 Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications.	Series: – Resistance (Ohm): 220 Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 – 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 × 1 × 1 cm	
No Image	<b>EDR-00001-330Z</b>	Resistor - 330 Ohm	ED - Electronic Device	Yageo, Vishay, KOA Speer, TE Connectivity, Generic	It is a 330 Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications.	Series: – Resistance (Ohm): 330 Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 – 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 × 1 × 1 cm	
No Image	<b>EDR-00001-470Z</b>	Resistor - 470 Ohm	ED - Electronic Device	Yageo, Vishay, KOA Speer, TE Connectivity, Generic	It is a 470 Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications.	Power: 1/4 W Resistance: 47k ? Resistance Tolerance: 5% Type: Carbon Film Resistors	resistor • carbon film • 0.25w • passive • axial • 470ohm
No Image	<b>EDR-00001-680Z</b>	Resistor - 680 Ohm	ED - Electronic Device	Yageo, Vishay, KOA Speer, TE Connectivity, Generic	It is a 680 Ohm 0.25W Metal Film Resistor. This resistor is for through-hole applications.	Series: – Resistance (Ohm): 680 Tolerance (%): 1 Power Rating: 250mW Composition: Metal Film Temperature Coefficient: +/-50ppm/°C Operating Temperature (°C): -40 – 150 Case/Package: Axial Length (mm): 6 Mounting Type: Through Hole Shipping Weight: 0.001 kg Shipping Dimensions: 1 × 1 × 1 cm	resistor • carbon film • 0.25w • passive • axial • 680ohm

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>EDR-00002-10K0</b>	Potentiometer	ED - Electronic Device	ED Series / Generic Compatible, Bourns, Alpha, Omega	10K&Omega; rotary potentiometer used for adjusting voltage, current, and signal levels in electronic circuits. Features smooth single-turn rotation with a durable 15mm shaft and through-hole mounting. Ideal for audio control, Arduino analog input, sensor calibration, and embedded system tuning.	Manufacturer: Generic Resistance (Ohm): 10K Tolerance (%): 20 Temperature Coefficient: ±100ppm/°C Operating Temperature (°C): -40 to 80 Mounting Type: Through Hole Shaft Type: 15mm Rotary Shaft Adjustment Type: Single Turn Length (mm): 20 Width (mm): 17 (Body Diameter) Height (mm): 24 Weight (g): 6 Shipping Weight: 0.001 kg Shipping Dimensions (L x W x H): 1 x 1 x 1 cm	10K Potentiometer • Rotary Pot • Variable Resistor • WH148 Potentiometer • 3-Pin Pot
No Image	<b>EDT-00001-A</b>	Gas Sensor Device	ED - Electronic Device	N/A			
No Image	<b>EDT-00001-B</b>	Gas Sensor Device	ED - Electronic Device	Hanwei Electronics, Winsen	Gas sensor device designed for detecting alcohol vapors and ethanol concentration in the air. It is commonly used for breath alcohol detection systems, safety monitoring, and embedded IoT applications. The sensor provides analog output based on gas concentration, making it suitable for microcontroller-based systems like Arduino and Raspberry Pi.	Sensor Type: Alcohol / Ethanol Gas Sensor Target Gas: Ethanol (C <sub>2</sub> H <sub>5</sub> 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
No Image	<b>EDT-00001-C</b>	Gas Sensor Device	ED - Electronic Device	Hanwei Electronics, Winsen, Figaro Engineering	Gas sensor device designed for detecting methane (CH <sub>4</sub> ), CNG, and natural gas leaks in the environment. It is widely used in safety monitoring systems, industrial gas leak detection, smart home safety devices, and IoT-based gas monitoring applications. The sensor provides analog output proportional to gas concentration, making it suitable for microcontroller-based systems like Arduino and embedded controllers.	Sensor Type: Methane / CNG Gas Sensor Target Gas: CH <sub>4</sub> (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
No Image	<b>EDT-00001-D</b>	Gas Sensor Device	ED - Electronic Device	Hanwei Electronics, Winsen, Figaro Engineering	Gas sensor device designed for detecting LPG, propane, butane, smoke, and natural gas leaks in air safety and monitoring applications. It is widely used in gas leakage detection systems, smart home safety devices, industrial safety alarms, and IoT-based environmental monitoring systems.	Sensor Type: LPG / Natural Gas Sensor Target Gas: LPG (Propane, Butane), Natural Gas, Smoke Operating Voltage: 5V DC Warm-up Time: 20–60 seconds Detection Range: ~200–10000 ppm (typical)	MQ-2 Sensor • LPG Sensor • Propane Sensor • gas leak detector • natural gas sensor
No Image	<b>EDT-00001-E</b>	Gas Sensor Device	ED - Electronic Device	Hanwei Electronics, Winsen, Figaro Engineering	Gas sensor device designed for detecting LPG (liquefied petroleum gas), butane, and propane gas leaks in safety and monitoring applications. It is commonly used in gas leakage alarm systems, smart home safety devices, industrial safety monitoring, and IoT-based gas detection projects. The sensor provides analog output proportional to gas concentration, allowing easy interfacing with microcontrollers such as Arduino and embedded systems.	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
No Image	<b>EDT-00001-F</b>	Gas Sensor Device	ED - Electronic Device	Hanwei Electronics, Winsen, Figaro Engineering	Gas sensor device designed for detecting carbon monoxide (CO), a highly toxic and odorless gas commonly produced by incomplete combustion. It is widely used in safety monitoring systems, industrial environments, smart home safety devices, and IoT-based air quality applications.	Sensor Type: Carbon Monoxide (CO) Gas Sensor Target Gas: CO (Carbon Monoxide) Operating Voltage: 5V DC Warm-up Time: 20–48 hours initial, few minutes per cycle Detection Range: ~20–2000 ppm (typical)	Carbon Monoxide Sensor • CO Sensor • Gas Detector • MQ-7 sensor • toxic gas sensor
No Image	<b>EDT-00001-G</b>	Gas Sensor Device	ED - Electronic Device	Winsen, Hanwei Electronics	Air quality device designed for detecting and monitoring harmful gases and air pollution levels in the environment. It measures gases such as CO, CO <sub>2</sub> , smoke, LPG, methane, and other volatile compounds depending on the sensor type used. Commonly used in environmental monitoring systems, smart home automation, industrial safety systems, IoT air monitoring stations, and educational electronics projects.	Sensor Type: Multi-Gas Air Quality Sensor Device Detected Gases: CO, CO <sub>2</sub> , Smoke, LPG, Methane, VOCs Operating Voltage: 5V DC Warm-up Time: 20–60 seconds	gas sensor • air quality device • pollution detector • MQ sensor • air monitoring system
No Image	<b>EMA-00001-A</b>	I2C LCD	EM - Electronic-Electrical Modules	MWduino / Generic, KEYESTUDIO, SunFounder	16x2 character LCD module with integrated I2C interface for simplified wiring. Blue backlight with white characters for clear and high-contrast visibility. Ideal for Arduino, Raspberry Pi, and embedded systems requiring compact data display.	Model: Other LCD Model No.: LCD1602 Display Type: 16 x 2 Character LCD Backlight Color: Blue Character Color: White I2C Address: 0x27 Input Voltage (V): 5 Length (mm): 36 Width (mm): 80 Height (mm): 18 Weight (g): 35 Shipping Weight: 0.037 kg Shipping Dimensions (L x W x H): 8 x 5 x 3 cm	LCD1602 • 16x2 LCD • I2C LCD Display • Arduino Display • Character LCD Module

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No Image	<b>EMA-00002-A</b>	SSD1306 0.96 inch I2C OLED display	EM - Electronic-Electrical Modules	Solomon Systech, SparkFun, DFRobot	The SSD1306 0.96 inch I2C OLED Display is a compact monochrome graphical display module commonly used with Arduino, ESP32, Raspberry Pi, and other microcontrollers. It typically features a 128x64 pixel resolution and uses the SSD1306 OLED driver IC with an I2C communication interface.	Product Type: OLED Display Module Display Size: 0.96 inch Driver IC: SSD1306 Resolution: 128 x 64 Pixels Operating Voltage: 3.3V – 5V DC	SSD1306 OLED Display • 0.96 OLED Module • I2C OLED Display • OLED Screen Module
No Image	<b>EMA-00003-C</b>	CJMCU WS2812 RGB LED BreakOut Module (Black)	EM - Electronic-Electrical Modules	Worldsemi, CJMCU, SparkFun Electronics	The CJMCU WS2812 RGB LED Breakout Module (Black) is a compact addressable RGB LED board based on the WS2812B intelligent LED driver IC mounted on a black PCB. Each module contains a full-color RGB LED with an integrated controller, allowing independent control of color and brightness using only a single data pin.	Product Type: Addressable RGB LED Breakout Module LED Type: WS2812B PCB Color: Black LED Colors: Red, Green, Blue (RGB) Operating Voltage: 5V DC	Addressable RGB LED • CJMCU WS2812 Black Module • WS2812 RGB LED Black • NeoPixel Black PCB
No Image	<b>EMA-00003-D</b>	RGB LED Ring 12x	EM - Electronic-Electrical Modules	Worldsemi, CJMCU, SparkFun	The RGB LED Ring 12x is a circular addressable RGB LED module containing 12 individually controllable WS2812B (NeoPixel-type) LEDs arranged in a ring shape. Each LED includes an integrated driver IC, allowing independent color and brightness control through a single data line.	Product Type: RGB LED Ring Module Number of LEDs: 12 LED Type: WS2812B LED Colors: RGB Full Color Operating Voltage: 5V DC	RGB LED Ring 12x • WS2812 LED Ring • NeoPixel Ring 12 LED • Addressable RGB Ring • 12 Pixel LED Ring
No Image	<b>EMA-00003-F</b>	CJMCU WS2812 RGB LED BreakOut Module (Red)	EM - Electronic-Electrical Modules	Worldsemi, CJMCU, SparkFun	The CJMCU WS2812 RGB LED Breakout Module is a compact addressable RGB LED board based on the WS2812 intelligent LED driver IC. Each module contains a full-color RGB LED with an integrated controller, allowing independent color and brightness control using a single data line.	Product Type: Addressable RGB LED Module LED Type: WS2812B LED Colors: Red, Green, Blue (RGB) Operating Voltage: 5V DC	CJMCU WS2812 Module • WS2812 RGB LED • NeoPixel LED Module • Addressable RGB LED • WS2812 Breakout Board
No Image	<b>EMA-00004-A</b>	8x8 Single Colour LED Dot Matrix Display with MAX7219 driver	EM - Electronic-Electrical Modules	Analog Devices, Keystudio, SparkFun	The 8x8 Single Colour LED Dot Matrix Display with MAX7219 Driver is an LED matrix module that combines a single-color 8x8 LED display with the MAX7219 LED driver IC for easy control and multiplexing.	Product Type: LED Matrix Display Module Matrix Size: 8 x 8 Driver IC: MAX7219 Number of LEDs: 64 LEDs Operating Voltage: 5V DC	MAX7219 LED Matrix Module • 8x8 LED Matrix Display • MAX7219 Dot Matrix • Arduino LED Matrix
No Image	<b>EMA-00009-A</b>	ISD1820 Voice Recording & Playback Module with Mic and Speaker	EM - Electronic-Electrical Modules	Nuvoton Technology Corporation, Generic / OEM	ISD1820 Module, Voice Recorder, 10s Audio, Playback Module, Onboard Mic, &&Omega; Speaker, Arduino Compatible, Sound Board . The ISD1820 Voice Recording Module allows up to 10 seconds of audio recording stored in non-volatile analog flash memory. &nbsp;It features an onboard electret microphone, push-button controls, and supports external triggering via microcontroller.	IC Chip: ISD1820 Operating Voltage (VDC): 3 – 5 Recording Duration: Up to 10 seconds Memory Type: Non-Volatile Analog Flash Microphone: Onboard Electret Microphone Speaker: 8 ? , 0.5W Speaker Cable Length (cm): 20 Speaker Diameter (mm): 40 Control Options: Push Buttons or Microcontroller Digital Pin Interface: 2.54 mm Header Pins Length (mm): 42 Width (mm): 33.5 Height (mm): 11.5 Weight (g): 20 Shipping Weight: 0.022 kg Shipping Dimensions (L x W x H cm): 8 x 6 x 3	Arduino Compatible • ISD1820 Module • Voice Recorder • 10s Audio • Playback Module • Onboard Mic • 8? Speaker • Sound Board
No Image	<b>EMA-00010-A</b>	L298N 2 Channel Motor Driver	EM - Electronic-Electrical Modules	STMicroelectronics, Keystudio, SparkFun, HiLetgo	The L298N 2 Channel Motor Driver Module is a dual H-Bridge motor control board used to control the speed and direction of two DC motors independently or one stepper motor. It is based on the STMicroelectronics L298N motor driver IC and is commonly used with Arduino, ESP32, Raspberry Pi, and other microcontrollers. The module can handle higher voltage and current compared to direct microcontroller outputs, making it suitable for robotics and automation applications. It includes onboard flyback diodes, a heat sink, and a 5V voltage regulator for stable operation.	Product Type: Dual Motor Driver Module Driver IC: L298N Motor Channels: 2 DC Motors Motor Voltage: 5V – 35V DC Logic Voltage: 5V	DC Motor Driver Board • L298N Motor Driver • L298N 2 Channel Driver • Dual H-Bridge Module
No Image	<b>EMA-00010-B</b>	Motor Driver Module	EM - Electronic-Electrical Modules	Texas Instruments, STMicroelectronics, NXP Semiconductors, ON Semiconductor, Toshiba	The L293D Motor Driver Module is a dual H-bridge driver used to control DC and stepper motors. It allows direction and speed control using PWM signals from microcontrollers like Arduino. Ideal for robotics and automation projects with support up to 12V and 600mA current.	Driver IC: L293D Motor Type: DC & Stepper Motor Operating Voltage: 4.5V – 12V Current Rating: 600mA per channel Peak Current: 600mA Control Method: Direction + PWM Speed Control Number of Channels: 2 (H-Bridge) Arduino Compatible: Yes (via wires) Polarity Protection: NO Cooling Fan: NO Dimensions: 48 x 34 x 14 mm Weight: 15g	motor • l293d • motor driver • dc motor • stepper motor • robotics • arduino • h-bridge • pwm

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>EMA-00010-C</b>	L293D Motor Driver	EM - Electronic-Electrical Modules	Texas Instruments, STMicroelectronics, SparkFun	The L293D Motor Driver is a dual H-Bridge motor driver IC designed to control the direction and speed of DC motors and stepper motors using microcontrollers like Arduino, ESP32, Raspberry Pi, and PIC controllers. It acts as an interface between low-power control circuits and higher-current motors.	Product Type: Motor Driver IC Driver Type: Dual H-Bridge Motor Channels: 2 DC Motors / 1 Stepper Motor Logic Voltage: 4.5V – 7V Motor Supply Voltage: 4.5V – 36V	Arduino Motor Driver • Stepper Motor Driver • Robot Motor Controller • L293D Motor Driver • L293D IC • Dual H-Bridge Driver • DC Motor Driver IC • L293D Driver Module
No Image	<b>EMA-00010-D</b>	L293D Motor Driver	EM - Electronic-Electrical Modules	Texas Instruments, STMicroelectronics, SparkFun	The L293D Motor Driver is a dual H-Bridge motor driver IC used to control DC motors and stepper motors using microcontrollers like Arduino, ESP32, Raspberry Pi, and PIC controllers. It allows low-power digital circuits to safely control higher-current motors. The IC contains two H-Bridge circuits, enabling independent bidirectional control of two DC motors or one stepper motor. The built-in flyback protection diodes help protect the circuit from voltage spikes generated by motors.	Product Type: Motor Driver IC IC Type: Dual H-Bridge Motor Channels: 2 DC Motors or 1 Stepper Motor Logic Voltage: 4.5V – 7V Motor Voltage: 4.5V – 36V Output Current: 600mA per channel	Arduino Motor Driver • Stepper Motor Driver • Robot Motor Controller • L293D Motor Driver • L293D IC • Dual H-Bridge Driver • DC Motor Driver IC • L293D Driver Module
No Image	<b>EMA-00010-E</b>	L 298 Motor Driver Module	EM - Electronic-Electrical Modules	STMicroelectronics, STMicroelectronics, SparkFun, Keystudio	The L298 Motor Driver Module (L298N) is a dual H-Bridge motor driver used to control the speed and direction of DC motors and stepper motors. It allows microcontrollers like Arduino, ESP32, and Raspberry Pi to drive motors that require higher current and voltage than the controller can provide directly.	Product Type: Motor Driver Module IC Used: L298N Dual H-Bridge Motor Channels: 2 DC motors or 1 stepper motor Operating Voltage (Logic): 5V Motor Voltage: 5V – 35V DC	L298 Motor Driver • L298N Module • Dual H-Bridge Motor Driver • DC Motor Driver Board • Arduino Motor Driver • Stepper Motor Driver • Robot Motor Controller • L298N H-Bridge Module
No Image	<b>EMC-00001-A</b>	RF 433/315 MHz Transmitter and Receiver Module Kit	EM - Electronic-Electrical Modules	HopeRF, Wireless Tag	The RF 433/315 MHz Transmitter and Receiver Module Kit is a wireless communication system used to send and receive data over radio frequency. It typically includes an RF transmitter module and an RF receiver module that operate at 433 MHz (or 315 MHz in some variants). The transmitter sends digital signals by modulating radio waves, and the receiver decodes these signals back into data. It is commonly used for short-range wireless communication between microcontrollers like Arduino, ESP8266, ESP32, and other embedded systems.	Product Type: RF Wireless Communication Module Frequency: 433 MHz / 315 MHz Operating Voltage: 3V – 5V DC Data Rate: Up to ~10 kbps (typical) Range: 20m – 100m (depends on antenna & environment)	RF 433MHz Module • 315MHz RF Module • Wireless Transmitter Receiver Kit • RF Communication Module • Arduino RF Module • ASK RF Module • Wireless Remote Module • 433MHz RF Pair Kit
No Image	<b>EMK-00001-A</b>	RFID Kit	EM - Electronic-Electrical Modules	NXP Semiconductors, Keystudio, SparkFun, HiLetgo	The RFID Kit is a wireless identification system used to read and write data from RFID tags/cards using radio frequency communication. Most common Arduino-compatible kits use the RC522 RFID module, which operates at 13.56 MHz and communicates via SPI interface. It includes an RFID reader, key fob tags, and cards.	Product Type: RFID Reader Kit Operating Frequency: 13.56 MHz Operating Voltage: 3.3V Read Range: ~2–5 cm	RFID Kit • RFID Reader Module • RC522 RFID Kit • RFID Card Reader • Arduino RFID Module • NFC Reader Module • RFID Tag System • Access Control Kit
No Image	<b>EMP-00001-A</b>	9V wall power supply	EM - Electronic-Electrical Modules	Mean Well, Hi-Link, Delta Electronics	The 9V Wall Power Supply Adapter is an AC-to-DC switching power supply designed to provide regulated 9V DC output for electronic circuits, Arduino boards, routers, DIY electronics, audio devices, sensors, and embedded systems. It converts high-voltage AC mains power into stable low-voltage DC suitable for powering electronic devices safely and efficiently.	Product Type: AC to DC Power Adapter Output Voltage: 9V DC Input Voltage: 100V – 240V AC Output Current: 500mA / 1A / 2A Frequency: 50/60 Hz	Wall Power Supply • Arduino Power Adapter • 9V Power Adapter • 9V DC Adapter • 9V SMPS Adapter
No Image	<b>EMP-00001-B</b>	5V wall power supply Adapter	EM - Electronic-Electrical Modules	Mean Well, Hi-Link, Delta Electronics	The 5V Wall Power Supply Adapter is an AC-to-DC switching power supply used to provide regulated 5V DC output for electronic circuits, development boards, IoT devices, LED systems, routers, sensors, and embedded projects. These adapters convert high-voltage AC mains power into stable low-voltage DC suitable for electronics applications.	Product Type: AC to DC Power Adapter Output Voltage: 5V DC Input Voltage: 100V – 240V AC Output Current: 1A / 2A / 3A Power Supply Type: SMPS	SMPS Adapter • 5V Power Adapter • 5V DC Adapter • Wall Power Supply • Arduino Power Adapter

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>EMP-00001-C</b>	Power Adapter	EM - Electronic-Electrical Modules	Generic / OEM, Mean Well, Delta Electronics, LEICKE	12V 2A Switched Mode Power Supply (SMPS) adapter designed to provide stable and regulated DC output. Converts AC 100&ndash;240V input to 12V DC output with low losses and high efficiency compared to conventional linear power supplies. Suitable for powering Arduino boards, routers, LCD displays, DC motors, audio equipment, TV boxes, mini electronics, and other devices requiring up to 2A current.	Input Voltage: 100–240V AC Output Voltage: 12V DC Maximum Output Current: 2A Output Connector Size: 5.5 × 2.5 mm Polarity: Center Positive Operating Temperature: -25°C to +60°C Shipping Weight: 0.02 kg Shipping Dimensions: 10 × 6 × 6 cm	12V Adapter • 12V 2A Power Supply • SMPS Adapter • AC-DC Adapter • 5.5x2.5mm Power Adapter

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>EMS-00001-A</b>	MQ-2 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. &nbsp;Ideal for gas leakage detection, safety systems, and Arduino-based environmental monitoring 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 x 20 x 21 Weight (g): 8 Shipping Weight: 0.012 kg Shipping Dimensions (cm): 4 x 4 x 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
No Image	<b>EMS-00002-A</b>	DHT11 Temperature and Humidity Sensor	EM - Electronic-Electrical Modules	EM Series / Generic Compatible, KEYESTUDIO, SunFounder, DFRobot	Digital temperature and humidity sensor module with calibrated single-wire serial output. Features onboard pull-up resistor and LED status indicator for easy interfacing. Ideal for weather stations, environmental monitoring, and smart automation projects.	Item Type: Sensor Model: DHT11 Temperature and Humidity Sensor Measuring Temperature Range (°C): 0 – 50 Temperature Accuracy: ± 2 °C Humidity Range: 20 – 95 % RH Humidity Accuracy: ± 5 % RH Resolution: 16 bit Output Form: Digital Output (Single Wire Serial) Operating Voltage (VDC): 3 – 5 Operating Current (mA): ? 2.5 Dimensions (L x W x H mm): 31 x 14 x 7.5 Weight (g): 5 Shipping Weight: 0.01 kg Shipping Dimensions (L x W x H cm): 5 x 5 x 2	DHT11 • Temperature Sensor • Humidity Sensor • Digital Temp Sensor • Arduino Climate Sensor
No Image	<b>EMS-00003-A</b>	Accelerometer module GY 521	EM - Electronic-Electrical Modules	InvenSense, Generic Electronics, DFRobot, SparkFun Electronics	The GY-521 Accelerometer Module is a 6-axis motion tracking sensor board based on the MPU6050 MEMS sensor IC. It combines a 3-axis accelerometer and a 3-axis gyroscope in a single compact module, allowing accurate measurement of acceleration, tilt, rotation, vibration, and motion.	Product Type: Accelerometer + Gyroscope Module Model: GY-521 Main IC: MPU6050 Communication: I2C Operating Voltage: 3V – 5V DC	GY-521 Accelerometer Module • MPU6050 Sensor Module • 6DOF Motion Sensor • Gyroscope Accelerometer Module
No Image	<b>EMS-00003-B</b>	Accelerometer module GY-61 (ADXL335)	EM - Electronic-Electrical Modules	N/A			
No Image	<b>EMS-00003-C</b>	Accelerometer module MMA7361	EM - Electronic-Electrical Modules	Freescale Semiconductor, DFRobot, Elecrow	The MMA7361 Accelerometer Module is a low-power 3-axis analog accelerometer sensor designed to measure acceleration, tilt, vibration, orientation, and motion along X, Y, and Z axes. It is based on the Freescale/NXP MMA7361L MEMS accelerometer IC and provides analog voltage outputs proportional to acceleration values.	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
No Image	<b>EMS-00007-A</b>	Temperature sensor Module - DS18B20	EM - Electronic-Electrical Modules	Maxim Integrated, DFRobot, SparkFun	The DS18B20 Temperature Sensor Module is a digital temperature sensing device designed for accurate temperature measurement using the 1-Wire communication protocol. Developed by Dallas Semiconductor (now Maxim Integrated), the DS18B20 provides calibrated digital temperature readings with high accuracy and supports multiple sensors on a single data line.	Product Type: Digital Temperature Sensor Model: DS18B20 Communication Protocol: 1-Wire Operating Voltage: 3V – 5.5V DC Temperature Range: -55°C to +125°C Accuracy: ±0.5°C	DS18B20 Temperature Sensor • Waterproof Temperature Sensor • Digital Temperature Sensor • One Wire Temperature Sensor
No Image	<b>EMS-00010-A</b>	MQ-2 Gas Sensor Module- Methane, Butane, LPG, Smoke	EM - Electronic-Electrical Modules	Hanwei Electronics, Winsen Electronics, SparkFun Electronics, DFRobot	The MQ-2 Gas Sensor Module is a semiconductor-based gas detection sensor designed to detect combustible and flammable gases such as Methane, Butane, LPG, Propane, Hydrogen, Alcohol, and Smoke. It uses a tin dioxide (SnO <sub>2</sub> ) sensing layer whose resistance changes when exposed to combustible gases.	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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>EMS-00010-B</b>	Alcohol Gas Sensor Module	EM - Electronic-Electrical Modules	Hanwei Electronics, Winsen Electronics, Waveshare	MQ-3 Alcohol Gas Sensor Module is used to detect alcohol concentration in the air and provides both analog and digital outputs. The module is based on the MQ-3 gas sensor which uses SnO <sub>2</sub> (Tin Dioxide) sensing material. The sensor operates from 2.5V to 5V and includes an onboard potentiometer to adjust the digital output threshold level.	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
No Image	<b>EMS-00010-C</b>	Methane and Natural Gas sensor	EM - Electronic-Electrical Modules	Hanwei Electronics, Winsen Electronics, Waveshare	MQ-4 Gas Sensor Module is a high sensitivity gas detection module used for sensing Methane (CH <sub>4</sub> ), CNG, and natural gas leakage in the environment. An onboard potentiometer allows adjustment of the gas detection threshold level for digital output triggering. MQ-4 sensor is widely used in gas leakage alarms, industrial safety systems, and smart monitoring projects.	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	<b>EMS-00010-D</b>	Natural Gas and LPG Analog Sensor	EM - Electronic-Electrical Modules	Hanwei Electronics, Winsen Electronics, Waveshare	The MQ-5 is used in gas leakage detecting equipment in consumer and industry applications, this sensor is suitable for detecting LPG, natural gas, coal gas. Avoid the noise of alcohol, cooking fumes, and cigarette smoke. The sensitivity can be adjusted by the potentiometer. The sensitive material of the MQ-5 gas sensor is SnO <sub>2</sub> , which with lower conductivity in clean air. When the target combustible gas exists, The sensor's conductivity is higher along with the gas concentration rising. Please use a simple electro circuit, Convert change of conductivity to the corresponding output signal of gas concentration. The sensor could be used to detect different combustible gas especially Methane, it is with low cost and suitable for different application	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
No Image	<b>EMS-00010-E</b>	Flammable Gas Sensor	EM - Electronic-Electrical Modules	Hanwei Electronics, Zhengzhou Winsen Electronics, DFRobot	This is a simple-to-use MQ-6 Liquefied Petroleum Isobutane Propane Gas Sensor module, suitable for sensing LPG (composed of mostly propane and butane) concentrations in the air. The MQ-6 can detect gas concentrations anywhere from 200 to 10000ppm. This sensor has high sensitivity and fast response time. The sensor's output is an analog resistance. The drive circuit is very simple; all you need to do is power the heater coil with 5V, add a load resistance, and connect the output to an ADC. The sensitive material of the MQ-6 gas sensor is SnO <sub>2</sub> , which with lower conductivity in clean air. When the target combustible gas exists, The sensor's conductivity is higher along with the gas concentration rising. Please use a simple electro circuit, Convert change of conductivity to the corresponding output signal of gas concentration.	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
No Image	<b>EMS-00010-F</b>	MQ-7 sensor module	EM - Electronic-Electrical Modules	Hanwei Electronics, Zhengzhou Winsen Electronics, DFRobot	This MQ7 Carbon Monoxide Gas Sensor Module is a semiconductor gas sensor tuned to detect carbon monoxide. It is in the same family of devices as the smoke detector sensor, measuring the change in surface conductivity of tin dioxide in the presence of carbon monoxide. This sensor has high sensitivity and fast response time. The sensor can measure concentrations of 10 to 10,000 ppm. The sensor can operate at temperatures from -10 to 50°C and consumes less than 150 mA at 5 V. This module provides both digital and analog outputs. The threshold level for digital output can be easily adjusted using the preset on the board. The MQ-7 sensor module can be easily interfaced with Micro-controllers, Arduino and etc.	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	<b>EMS-00010-G</b>	MQ135 gas sensor	EM - Electronic-Electrical Modules	Hanwei Electronics, Zhengzhou Winsen Electronics, Futurlec	The MQ 135 Air Quality Detector Sensor Module For Arduino has lower conductivity in clean air. When the target combustible gas exists, the conductivity of the sensor is higher along with the gas concentration rising. Convert change of conductivity to the corresponding output signal of gas concentration. The MQ135 gas sensor has a high sensitivity to Ammonia, Sulphide, and Benzene steam, also sensitive to smoke and other harmful gases. It is at low cost and suitable for different applications such as harmful gases/smoke detection.	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

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>EMS-00010-H</b>	Hydrogen Gas Sensor - MQ-8 - SEN-10916	EM - Electronic-Electrical Modules	SparkFun Electronics, Hanwei Electronics, Winsen Electronics, SparkFun	The MQ-8 Hydrogen Gas Sensor is a semiconductor-based gas detection sensor designed to detect hydrogen (H?) gas concentration in air. It is highly sensitive to hydrogen and can detect gas concentrations ranging from 100 ppm to 10,000 ppm. The sensor uses a tin dioxide (SnO?) sensing layer whose resistance changes when exposed to hydrogen gas. The module provides both analog and digital outputs, making it easy to interface with Arduino, ESP32, Raspberry Pi, STM32, and other microcontrollers.	Product Type: Hydrogen Gas Sensor Model: MQ-8 SparkFun SKU: SEN-10916 Detectable Gas: Hydrogen (H?) 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
No Image	<b>EMS-00011-A</b>	GPS module	EM - Electronic-Electrical Modules	u-blox, Quectel, DFRobot, SparkFun	The GPS Module is a satellite-based positioning and navigation device used to determine real-time location, speed, altitude, and time information. Most hobby and embedded systems commonly use the Neo-6M GPS module, which communicates through UART serial interface and receives signals from GPS satellites.	Product Type: GPS Navigation Module Model: Neo-6M Operating Voltage: 3V – 5V DC Baud Rate: 9600 bps	GPS Module • Neo-6M GPS • GNSS Receiver • Arduino GPS Module • ESP32 GPS Module • Satellite Navigation Module • UART GPS Sensor • Location Tracking Module
No Image	<b>EMS-00012-A</b>	Color Sensor	EM - Electronic-Electrical Modules	ams-OSRAM, ams-OSRAM, ams-OSRAM, Generic Electronics	The TCS3200 Color Sensor Module is an RGB color detection sensor designed to identify and measure colors using red, green, and blue filtered photodiodes. The module uses the TCS3200/TCS230 light-to-frequency converter IC to convert light intensity into frequency signals readable by microcontrollers.	Product Type: RGB Color Sensor Model: TCS3200 / TCS230 Sensor Type: Light-to-Frequency Converter Operating Voltage: 2.7V – 5.5V DC	Arduino Color Sensor • Color Detection Module • TCS3200 Color Sensor • RGB Color Sensor • TCS230 Sensor • RGB Recognition Module • ESP32 Color Sensor • Light Frequency Sensor
No Image	<b>EMS-00012-B</b>	Color Sensor	EM - Electronic-Electrical Modules	ams-OSRAM, ams-OSRAM, ams-OSRAM, Generic Electronics	The TCS3200 Color Sensor Module is an RGB color recognition sensor used to detect and measure colors based on reflected light intensity. It uses the TCS3200/TCS230 light-to-frequency converter IC along with photodiodes and onboard white LEDs for accurate color detection.	Product Type: RGB Color Sensor Model: TCS3200 / TCS34725 Sensor Type: Light-to-Frequency Converter Operating Voltage: 2.7V – 5.5V DC	TCS3200 Sensor • RGB Sensor • Color Sensor • TCS230 Module • Arduino Color Sensor • ESP32 RGB Sensor • Color Detection Module
No Image	<b>EMS-00013-A</b>	Infrared Obstacle Avoidance IR Sensor Module	EM - Electronic-Electrical Modules	Generic OEM Manufacturer, Keystudio, HiLetgo, Elegoo, SunFounder	The Infrared Obstacle Avoidance Sensor Module detects nearby objects using reflected infrared light. It uses an IR transmitter&ndash;receiver pair with an LM393 comparator to provide a digital active LOW output when an obstacle is detected. Ideal for robotics, smart cars, automation systems, and Arduino-based proximity detection projects.	Sensor Type: Infrared Reflective Obstacle Sensor Operating Voltage: 3.6V - 5V DC Output Type: Digital (Active Low) Main IC: LM393 Comparator Average Current Consumption: 0.06 mA Detection Angle: 35° Detection Distance: 2 cm – 30 cm (adjustable) Interface Pins: VCC, GND, OUT Indicator LED: Yes (Obstacle Detection Indicator) Sensitivity Adjustment: Onboard Potentiometer Dimensions (mm): 48 x 14 x 8 Weight (g): 5 Shipping Weight: 0.01 kg Shipping Dimensions (cm): 5 x 4 x 1	IR Obstacle Sensor • Infrared Reflective Module • LM393 Comparator • Active Low Output • Proximity Sensor • Arduino Compatible • Robot Sensor
No Image	<b>EMS-00014-A</b>	Touch Detector	EM - Electronic-Electrical Modules	Tontek Design Technology, Shenzhen Tontek (Tontek IC), Generic Module Manufacturer, Waveshare (Module Vendor), Keystudio (Arduino Vendor)	TTP223B Capacitive Touch Key Sensor Module is based on a touch-sensing IC capacitive touch switch module. It allows you to remove the worry of conventional push-type keys. Digital Capacitive Touch Switch Module is based on TTP223B. Normally, it outputs low and keeps at a low power state. When a touch is sensed on the circular marked region, it outputs high and switches to the quick response state. When not being touched for 12 seconds, it switches to a low power state again. In addition to the thin paper ( non-metallic ) covering the surface of the module, as long as the correct location of the touch, you can make it hidden in the walls, desktops, and other parts of buttons.	Item Type: Electronic Switch Model: Touch Switch IC Chip: TTP223B Operating Voltage: 2V – 5.5V Output High (VOH): 0.8 x VCC Output Low (VOL): 0.3 x VCC Response Time (Low Power Mode): 220 ms Response Time (Touch Mode): 60 ms Length: 24 mm Width: 24 mm Height: 2 mm Weight: 0.6 g Shipping Weight: 0.085 kg Shipping Dimensions: 3 x 3 x 1 cm	arduino • touch • TTP223B • capacitive sensor

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>EMS-00015-A</b>	Touch keyboard TTP229 16 keys capacitive	EM - Electronic-Electrical Modules	Tontek Design Technology, Robocraze, Keyestudio	The TTP229 16-Key Capacitive Touch Keyboard is a touch-sensitive input module based on the TTP229 capacitive sensing IC. Unlike traditional membrane or mechanical keypads, this module detects finger touch using capacitive sensing technology, providing silent, durable, and highly responsive operation.	Product Type: Capacitive Touch Keypad IC Used: TTP229 Number of Keys: 16 Key Layout: 4x4 Operating Voltage: 2.4V – 5.5V DC	TTP229 Touch Keypad • 16-Key Capacitive Keyboard • 4x4 Touch Sensor Module • Arduino/ESP32 Touch Input Module
No Image	<b>EMS-00015-B</b>	3x4 Membrane switch keypad	EM - Electronic-Electrical Modules	Adafruit, DFRobot, SparkFun, Keyestudio	The 3x4 12-Key Membrane Switch Keypad is a compact matrix-style input device commonly used in Arduino, ESP32, Raspberry Pi, PIC, AVR, and embedded electronics projects. It contains 12 push buttons arranged in a telephone-style 4-row x 3-column matrix layout.	Product Type: Membrane Matrix Keypad Key Layout: 3x4 Matrix Number of Keys: 12 Operating Voltage: 3V – 35V DC Connector Type: 7-pin Header	12 Key Matrix Keypad • Membrane Switch Keypad • Arduino Keypad • 3x4 Membrane Keypad • Numeric Keypad Module • 4x3 Matrix Keyboard • Telephone Style Keypad • Matrix Input Module
No Image	<b>EMS-00015-C</b>	4x4 Membrane switch keypad	EM - Electronic-Electrical Modules	Adafruit, Keyestudio, DFRobot, SparkFun	The 4x4 / 4x3 Membrane Switch Keypad is a thin and flexible matrix-style input device commonly used with microcontrollers like Arduino, ESP32, Raspberry Pi, PIC, and AVR boards. It contains multiple push buttons arranged in matrix rows and columns, allowing easy user input while using fewer GPIO pins.	Product Type: Membrane Matrix Keypad Key Layout: 4x4 / 4x3 Number of Keys: 12 or 16 Operating Voltage: 3V – 35V DC Connector Type: 7-pin / 8-pin Header	4x4 Membrane Keypad • 12 Key Matrix Keypad • Membrane Switch Keypad • Matrix Keyboard Module • Arduino Keypad • Numeric Input Module • 4x3 Matrix Keypad • Keypad Module
No Image	<b>EMS-00016-A</b>	Water Flow Sensor YF-G1	EM - Electronic-Electrical Modules	YF Electronics, DFRobot, FlyRobo, Robocraze	The YF-G1 Water Flow Sensor is a hall-effect liquid flow meter designed for measuring the flow rate of water and other non-corrosive liquids in pipelines. It contains an internal rotor with a magnet that spins when liquid flows through the sensor. The built-in hall-effect sensor detects the magnetic rotation and generates pulse signals proportional to the flow rate.	Product Type: Water Flow Sensor Model: YF-G1 Sensor Type: Hall Effect Flow Meter Operating Voltage: 5V – 18V DC Working Current: ? 15 mA Flow Range: 1 – 30 L/min	Water Flow Sensor • Hall Effect Flow Sensor • Liquid Flow Meter • Flow Rate Sensor • YF-G1 Sensor • Industrial Water Flow Sensor • Arduino Flow Sensor • Pipe Flow Detection Module
No Image	<b>EMS-00016-B</b>	Water Flow Sensor YF-S401	EM - Electronic-Electrical Modules	YF Electronics, DFRobot, FlyRobo, Robocraze	The YF-S401 Water Flow Sensor is a compact hall-effect liquid flow meter used to measure water flow rate in pipes and tubing systems. Inside the sensor, a rotor with magnets spins as water passes through it. The hall-effect sensor generates pulse signals proportional to the flow rate. It is widely used in water dispensers, smart irrigation systems, liquid monitoring systems, coffee machines, industrial automation, and Arduino/ESP32 projects.	Product Type: Water Flow Sensor Model: YF-S401 Sensor Type: Hall Effect Flow Meter Operating Voltage: 5V – 18V DC Working Current: ? 15 mA Flow Range: 0.3 – 6 L/min	YF-S401 Sensor • Water Flow Sensor • Hall Effect Flow Sensor • Liquid Flow Meter • Flow Rate Sensor • Arduino Water Flow Sensor • Flow Detection Module
No Image	<b>EMS-00017-A</b>	LDR Module	EM - Electronic-Electrical Modules	EM Series / Generic Compatible, KEYESTUDIO	The LDR Module detects ambient light intensity and provides a digital output based on brightness level. It features an onboard potentiometer to adjust sensitivity and threshold detection. Ideal for automatic lighting systems, Arduino projects, and light-based automation applications.	Model: Light Dependent Resistor Module Operating Voltage (V): 3.3 – 5 Operating Current (mA): 15 Output Type: Digital (DO) Adjustable Threshold: Yes (via Potentiometer) Sensor Type: Photoresistor (LDR) Mounting Hole: M3 Indicator LEDs: Power LED, Status LED Pin Configuration: VCC, GND, DO Length (mm): 36 Width (mm): 14 Height (mm): 8 Weight (g): 3 Shipping Weight: 0.005 kg Shipping Dimensions (L x W x H): 4 x 3 x 2 cm	LDR Module • Light Sensor • Photoresistor Module • LM393 Sensor • Arduino Light Sensor

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	EMS-00018-A	Water Level Sensor	EM - Electronic-Electrical Modules	Generic Electronics, Generic Electronics, DFRobot, SparkFun	The Water Level Sensor Module is used to detect and measure water levels in tanks, containers, reservoirs, automation systems, irrigation projects, and Arduino applications. It works using exposed parallel conductive traces that change resistance depending on the amount of water touching the sensor surface. Most modules provide both analog output (water level amount) and digital output (threshold detection using LM393 comparator). These sensors are widely used in smart irrigation systems, automatic water tank monitoring, rainwater harvesting, leak detection, and robotics projects.	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
No Image	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) is a resistive soil humidity detection device used to measure water content in soil. It provides both analog (AO) and digital (DO) outputs with adjustable sensitivity using an onboard LM393 comparator. Ideal for smart irrigation systems, plant monitoring, Arduino, and IoT-based environmental projects.	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 x 3 cm Cable Length: 20 cm Interface Pins: VCC, GND, DO, AO Shipping Weight: 0.02 kg Shipping Dimensions (cm): 8 x 6 x 3	Arduino Compatible • Soil Moisture Sensor • YL-69 • FC-28 • LM393 • Resistive Soil Sensor • Irrigation Sensor
No Image	EMS-00021-A	SW-520D Tilt Sensor	EM - Electronic-Electrical Modules	Generic Electronics, DFRobot, SparkFun, Keyestudio	The SW-520D Tilt Sensor Module is a simple digital angle detection sensor used to detect tilt, orientation change, vibration, or motion. It works using a metal ball inside a cylindrical switch that moves when the angle changes. When tilted beyond a certain threshold (around ~10°–15° depending on mounting), the internal contacts connect/disconnect and the module outputs a digital HIGH/LOW signal. It is widely used in security alarms, anti-theft systems, robotics balance detection, and Arduino/ESP32 projects.	Product Type: Tilt / Angle Sensor Module Sensor Type: Ball Switch (SW-520D) Output Type: Digital (0 / 1) Operating Voltage: 3.3V – 5V DC Comparator IC: LM393	SW-520D Sensor • Tilt Sensor Module • Angle Sensor • Ball Switch Sensor • Orientation Sensor • Digital Tilt Switch • Arduino Tilt Sensor
No Image	EMX-00001-A	Arduino Uno	EM - Electronic-Electrical Modules	Arduino, Elegoo, HiLetgo, Keyestudio	The Arduino Uno R3 is a microcontroller development board based on the ATmega328P, designed for building interactive electronic projects. It features 14 digital I/O pins, 6 analog inputs, a 16 MHz clock, USB connectivity, and operates at 5 V. Compatible with the Arduino IDE and a wide range of shields, it is widely used in education, prototyping, and embedded system development.	Board Type: Uno With Cable: Yes Operating Voltage: 5 V Input Voltage Range: 6 – 20 V Analog I/O Pins: 6 Digital I/O Pins: 14 (6 x PWM) DC Current per I/O Pin: 40 mA Clock Speed: 16 MHz SRAM: 2 KB EEPROM: 1 KB Flash Memory: 32 KB Dimensions (L x W x H): 75 x 54 x 12 mm Weight: 28 g (without cable), 54 g (with cable)	ATmega328P • 5 V Board • 16 MHz Crystal • USB Interface • Microcontroller • Educational Kit • Open-Source Hardware • Breadboard Compatible
No Image	EQE-00001-A	Digital vernier caliper	EQ - Equipment/Instrument	Mitutoyo, INSIZE, Baker Gauges, iGaging	Digital vernier calipers are precision measuring instruments used for measuring internal dimensions, external dimensions, depth, and step measurements. They feature an LCD display for accurate digital readings and are widely used in engineering, electronics, machining, woodworking, laboratories, robotics, and DIY projects.	Product Type: Digital Vernier Caliper Measuring Range: 0 – 150 mm Resolution: 0.01 mm Accuracy: ±0.02 mm Display Type: LCD Digital Display	DIY Measuring Tool • Digital Vernier Caliper • Electronic Caliper • LCD Caliper • Precision Measuring Tool • Digital Measuring Tool • Stainless Steel Caliper
No Image	EQM-00001-A	3D Printer	EQ - Equipment/Instrument	Tiertime Official Website, Cetus 3D Official Website, UP3D / Tiertime, Tiertime Europe	The Cetus MK3 is a compact FDM/FFF 3D printer developed by Tiertime for education, prototyping, STEM labs, hobby projects, and desktop manufacturing. It supports multiple nozzle sizes, Wi-Fi connectivity, touchscreen operation, and modular upgrades. The printer is known for compact size, reliable print quality, and support for PLA, PETG, TPU, and other materials.	Product Type: FDM / FFF 3D Printer Model: Cetus MK3 Printing Technology: MEM / FDM Build Volume: 180 x 180 x 180 mm Layer Resolution: 50 – 350 Micron Nozzle Sizes: 0.2 / 0.4 / 0.6 mm Filament Diameter: 1.75 mm	FDM Printer • Educational 3D Printer • Cetus MK3 • Cetus 3D Printer • DIY 3D Printer • Compact 3D Printer • Tiertime Printer
No Image	EQM-00001-B	3D Printer	EQ - Equipment/Instrument	FlashForge USA, Inventor Technologies, Robotbanao	The FlashForge Adventurer 3C is a compact FDM 3D printer designed for educational use, prototyping, STEM labs, hobby projects, and home manufacturing. It features automatic bed leveling support, a removable heated build plate, enclosed printing chamber, Wi-Fi connectivity, touchscreen control, and easy nozzle replacement. It is suitable for PLA, ABS, and PETG filament printing.	Product Type: FDM 3D Printer Model: Adventurer 3C Printing Technology: FDM (Fused Deposition Modeling) Build Volume: 150 x 150 x 150 mm Nozzle Diameter: 0.4 mm Max Nozzle Temperature: 240°C Filament Diameter: 1.75 mm	3D Printer • FlashForge Printer • Adventurer 3C • FDM Printer • DIY Printer • STEM Printer • Educational 3D Printer

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>MMB-00001-A</b>	Big cardboard box	MM - Mechanical Module	Packman Packaging, Corrugated Box India, Uline, Pragati Pack	Big cardboard boxes are heavy-duty corrugated storage and packaging boxes used for shipping, storage, moving, organizing tools, electronics kits, robotics components, workshop materials, and DIY projects. These boxes are lightweight, recyclable, and available in multiple sizes and thickness grades.	Product Type: Corrugated Cardboard Box Box Size: Large Material: Corrugated Cardboard Ply Type: 3 Ply / 5 Ply	Cardboard Box • Corrugated Box • Packaging Box • Storage Carton • Shipping Box • Moving Box • DIY Storage Box
No Image	<b>MMD-00001-A</b>	DC motor	MM - Mechanical Module	Roboman, Rytronics, Singh Varieties, Ercoms Robotics, Robiz (OEM)	Compact 3–6V DC mini motor ideal for Arduino smart cars and small DIY robotics projects.	Motor Size: 38 x 20 x 15 mm Shaft Diameter: 2 mm Shaft Length (Axial): 9 mm Operating Voltage: 3V – 6V Motor Type: DC Motor	dc motor • Mini Motor • 3V Motor • Arduino Motor • DIY Robotics • Smart Car Motor
No Image	<b>MMD-00001-B</b>	BO2 Side Shaft Plastic Gear Motor	MM - Mechanical Module	Generic Robotics, Robu.in, FlyRobo, DFRobot, Keyestudio	BO2 Side Shaft Plastic Gear Motor is a lightweight DC geared motor commonly used in robotics, smart car projects, line follower robots, obstacle avoidance robots, STEM kits, and Arduino DIY projects. It features a plastic gearbox with dual side shafts for easy wheel mounting and provides low-speed high-torque operation.	Product Type: Plastic Geared DC Motor Motor Type: BO2 Side Shaft Motor Operating Voltage: 3V – 12V DC Rated Voltage: 6V DC Speed Range: 60RPM – 300RPM	Arduino Motor • BO Motor • DC Gear Motor • BO2 Gear Motor • Plastic Gear Motor • Side Shaft Motor • Robot Motor
No Image	<b>MMD-00003-B</b>	150 RPM Geared Motor	MM - Mechanical Module	Johnson Motor, DFRobot, Robu.in, FlyRobo	150 RPM 12V geared motors are high-torque DC motors with integrated reduction gearboxes designed for robotics, smart vehicles, automation systems, conveyor mechanisms, DIY mechanical projects, and Arduino-based applications. The gearbox reduces speed while increasing torque for controlled movement.	Product Type: DC Geared Motor Rated Voltage: 12V DC Speed: 150 RPM Gearbox Type: Metal Gearbox Shaft Diameter: 6 mm Current Consumption: 100mA – 500mA	150RPM Motor • Geared DC Motor • 12V Gear Motor • High Torque Motor • Robotics Motor • DIY Motor • Metal Gear Motor
No Image	<b>MMD-00006-A</b>	Small Reduction Stepper Motor - 5VDC 32-Step 1/16 Gearing	MM - Mechanical Module	Adafruit, Songle Motor, Generic Stepper Motors, SunFounder	The Small Reduction Stepper Motor – 5VDC 32-Step 1/16 Gearing is commonly known as the 28BYJ-48 stepper motor. It is a compact geared unipolar stepper motor widely used in Arduino projects, robotics, automation systems, camera sliders, smart locks, and educational electronics. The internal reduction gearbox provides higher torque and precise low-speed rotation.	Product Type: Geared Stepper Motor Model: 28BYJ-48 Operating Voltage: 5V DC Gear Reduction Ratio: 1/64 Steps Per Revolution: 2048 Steps	Arduino Motor • 5V Stepper Motor • Reduction Stepper Motor • 28BYJ-48 • Geared Stepper Motor • Mini Stepper Motor • DIY Robotics Motor
No Image	<b>MMK-00001-A</b>	CABLES	MM - Mechanical Module	SparkFun, Adafruit, Pololu, Generic	Jumper wire cable set containing male-female, male-male, and female-female connection wires designed for breadboard prototyping, Arduino circuits, embedded systems, robotics, and electronics development applications. These cables provide reliable electrical connectivity, flexible routing, and easy plug-and-play interfacing between sensors, modules, microcontrollers, and development boards. Commonly used in DIY electronics, educational kits, IoT systems, PCB testing, and prototyping projects.	Cable Types: Male-Female, Male-Male, Female-Female Quantity: 80 MF, 80 MM, 80 FF Wire Length: 10cm – 30cm Conductor Material: Copper	Breadboard Wire • jumper wires • Dupont cable • MF cable • MM cable • FF cable
No Image	<b>MMM-00001-A</b>	BO Motor	MM - Mechanical Module	FlyRobo, RoboticsDNA, RoboElements	The 100 RPM Duel Shaft BO Motor motor gives good torque and rpm at lower operating voltages, which is the biggest advantage of these motors. It is an alternative to our metal gear DC motors. It comes with an operating voltage of 3-6V and is perfect for building small and medium robots. A small shaft with matching wheels gives an optimized design for your application or robot. Mounting holes on the body & lightweight makes it suitable for in-circuit placement. The motor is ideal for DIY enthusiasts. This motor set is inexpensive, small, easy to install, and ideally suited for use in a mobile robot car.	Gearbox Shape: Straight Operating Voltage: 3 – 6 V Rated Speed After Reduction: 100 RPM Shaft Diameter: 0.55 cm (Double) Shaft Length: 0.85 cm Dimensions (LxWxH): 7 x 2.3 x 1.9 cm	robotics • arduino • BO Motor • Gear Motor • Smart Car
No Image	<b>MMP-00001-A</b>	Spacers	MM - Mechanical Module	Keystone Electronics, Adafruit, DFRobot, Pro'sKit	Spacers are mechanical components used to create distance between PCBs, panels, enclosures, and mounted hardware in electronics, robotics, Arduino projects, and DIY assemblies. Common spacer materials include nylon, brass, aluminum, and stainless steel.	Product Type: Spacer / Standoff Thread Size: M3 Length Options: 5mm – 50mm	PCB Spacer • Mounting Spacer • DIY Hardware • Spacer • Nylon Spacer • Brass Spacer • Standoff Spacer
No Image	<b>TLC-00001-A</b>	Cutting mat	TL - Tools	OLFA, Deli, Fiskars, Pro'sKit	An A2 cutting mat is a self-healing protective work surface used for cutting paper, vinyl, fabric, PCB sheets, foam, leather, and craft materials. It protects tables and blades while providing printed measurement grids for accurate cutting in DIY, electronics, art, and workshop applications.	Product Type: Self Healing Cutting Mat Size: A2 Dimensions: Approx. 600 x 450 mm Material: PVC Multi-layer Thickness: 2 mm – 3 mm	Cutting Mat • A2 Cutting Mat • Self Healing Mat • Craft Mat • DIY Cutting Board • Precision Cutting Mat • Workshop Mat

Image	Part Number	Name	Category	Manufacturer	Description	Specification	Tags
No Image	<b>TLK-00001-A</b>	Professional Tool Kit	TL - Tools	Pro'sKit, Pro'sKit, Pro'sKit, Pro'sKit	Pro'sKit Professional Tool Kits are complete electronics and maintenance tool sets designed for PCB repair, electronics assembly, networking, electrical work, mobile repair, robotics, and DIY applications. These kits usually include screwdrivers, pliers, cutters, soldering tools, tweezers, and precision repair tools.	Product Type: Professional Tool Kit Tool Count: 25 pcs – 100 pcs Included Tools: Screwdrivers, Pliers, Cutters	Professional Tool Kit • Electronics Tool Kit • Repair Tool Kit • DIY Tool Kit • Maintenance Kit • Technician Tool Set
No Image	<b>TLK-00002-A</b>	Hot Pro'sKit 8PK-2061 6PCS Precision Screwdriver Set Cross Screwdriver	TL - Tools	Pro'sKit, Jakemy, Stanley, Bosch	Pro'sKit 8PK-2061 is a 6-piece precision screwdriver set designed for electronics repair, PCB work, mobile repair, watches, laptops, and precision DIY applications. It includes cross and slotted precision screwdrivers with ergonomic anti-slip handles and hardened steel tips.	Product Type: Precision Screwdriver Set Number of Pieces: 6 pcs Screwdriver Type: Cross & Slotted Usage: Mobile, Laptop, DIY Repair	DIY Tool • Electronics Repair Tool • Precision Screwdriver Set • Cross Screwdriver • Phillips Screwdriver • Mini Screwdriver Set
No Image	<b>TLM-00001-A</b>	PCB Helping Hand	TL - Tools	Proskit, Jakemy, YIHUA, HandsKit	PCB Helping Hand is a support tool used during soldering, PCB assembly, electronics repair, and DIY projects. It typically includes adjustable alligator clips, a weighted base, and sometimes a magnifying glass to hold circuit boards and components securely while working.	Clip Type: Alligator Clips Base Material: Cast Iron / Steel Usage: PCB Holding, Soldering	DIY Tool • PCB Helping Hand • Soldering Helper • Third Hand Tool • PCB Holder • Magnifier Stand • Electronics Repair Tool
No Image	<b>TLP-00001-A</b>	Hot Melt Glue Gun	TL - Tools	Generic / OEM, Stanley, Bosch, Pro'sKit	Standard temperature 40W hot melt glue gun designed for multipurpose bonding and repair applications. Features an ergonomic trigger mechanism for controlled glue dispensing and an integrated ON/OFF switch for safe operation.&nbsp;	Item Type: Hot Melt Glue Gun Color: Black Operating Voltage: 110–220 V AC Power Consumption: 40 W Melting Point: 190°C (±10°C) Compatible Glue Stick Diameter: 11 mm Weight: 180 g Shipping Weight: 0.2 kg Shipping Dimensions: 27 × 16 × 5 cm	Compatible with 11mm diameter glue sticks and suitable for DIY projects • electronics work • furniture repair • decoration • packaging • and household fixes.
No Image	<b>TLP-00004-A</b>	Bosch GSB 120-LI Professional Cordless Impact Drill	TL - Tools	Bosch, Robert Bosch GmbH	The Bosch GSB 120-LI Professional is a compact cordless impact drill designed for drilling and screwdriving applications in wood, metal, and masonry. It features a 12V lithium-ion battery system, variable speed control, reverse rotation, and impact drilling capability suitable for professional and DIY use.	Voltage: 12V Battery Type: Lithium-Ion No Load Speed: 0–400 / 0–1500 RPM Chuck Capacity: 10 mm Max Torque: 30 Nm Impact Rate: Up to 22,500 BPM	DIY Tool • Cordless Drill • Impact Drill • 12V Drill • Power Tool • Electric Drill • Professional Drill • Bosch Tool