

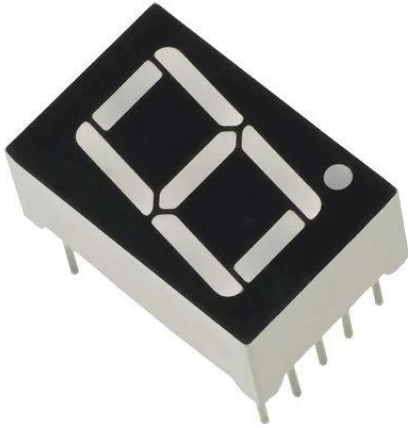


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Component Details

1.Seven Segment



- A seven-segment display is a form of electronic display device for displaying decimal numerals that is an alternative to the more complex dot matrix displays. Seven-segment displays are widely used in digital clocks, electronic meters, basic calculators, and other electronic devices that display numerical information.

2.Arduino Uno



- Both the Arduino Uno and Redboard interface with computers via USB, but the connectors are different. The Arduino Uno uses the larger, square-ish type-B connector. Type-B USB connectors are often found on USB printers, or other devices where size is not an issue. The RedBoard uses a mini-B USB connector.

3. Gas Sensor



- A gas sensor is defined as a device able to detect the presence of certain gases in a controlled volume.

4. DIR



- The SEC Signature DIR measures infrared light absorption due to molecular resonances. These dual gas analyzers are tuned to the infrared signature of the target gas or vapor, measuring light at wavelengths absorbed by the target gas and at wavelengths not absorbed by the target gas.

5.Color Sensor



- What is a color sensor? Among sensors that detect light, those that detect the three primary colors of red, green, and blue are called color sensors. Color sensors detect RGB values by receiving ambient light using a photodiode.

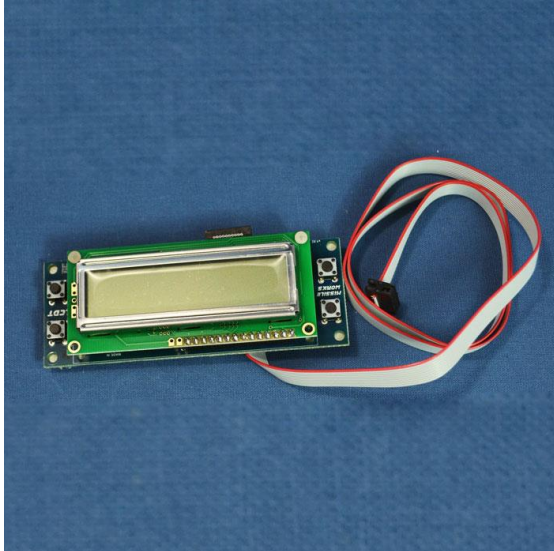
6.Jump Wires



- A jump wire (also known as jumper, jumper wire, DuPont wire) is an electrical wire, or group of them in a cable, with a connector or pin at each end (or sometimes without them – simply "tinned"), which is normally used to

interconnect the components of a breadboard or other prototype or test circuit, internally or with .

7.LED Terminal



- Power pins are responsible for powering the device and data pins are used to send data and commands to the LCD and receive data from it.

8.IR sensor



- IR sensor is a device that uses infrared technology to detect objects or changes in the environment. IR sensors can detect a wide range of physical properties such as temperature, motion, and proximity. IR LEDs are usually made of gallium arsenide or aluminum gallium arsenide.

9. ultrasonic sensor



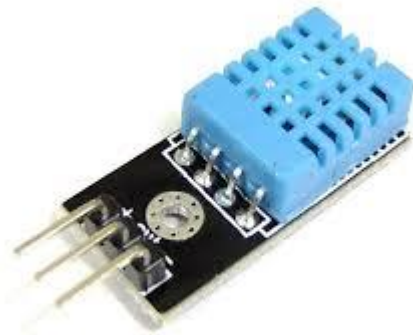
- An ultrasonic sensor is an instrument that measures the distance to an object using ultrasonic sound waves. An ultrasonic sensor uses a transducer to send and receive ultrasonic pulses that relay back information about an object's proximity.

10. Motor controllers



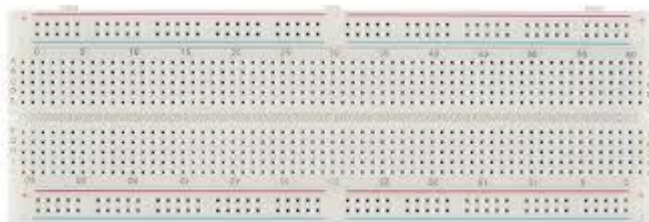
- Motor controllers are devices that regulate the operation of an electric motor. In artificial lift applications, motor controllers generally refer to those devices used in conjunction with switchboards or variable frequency drives to control the operation of the prime mover.

11.DHT11



- The DHT11 is a basic, ultra low-cost digital temperature and humidity sensor. It uses a capacitive humidity sensor and a thermistor to measure the surrounding air and spits out a digital signal on the data pin

12.Breadboard



- A breadboard (sometimes called protoboard) is essentially the foundation to construct and prototype electronics. A breadboard allows for easy and quick creation of temporary electronic circuits or to carry out experiments with circuit design.