LIGHT SENSORS

CdS PHOTOCELLS – PHOTO RESISTORS

Light dependent Cadmium sulfide resistors. Plastic coated resistors on ceramic, 0.2-0.25” dia. Light & dark resistances are approximate.

2MQ Dark – 1K Light
CAT# PRE-24 1.25 each
10 for $1.10 each

30K Dark – 1.5K Light
CAT# PRE-25 95¢ each
10 for 85¢ each • 100 for 70¢ each

3MQ Dark – 100Ω Light
CAT# PRE-26 95¢ each
10 for 85¢ each • 100 for 70¢ each

1MQ Dark – 180Ω Light
CAT# PRE-27 95¢ each
10 for 85¢ each • 100 for 70¢ each

Arduino-style module. Approximately 100Ω light, 10KΩ dark resistance. 0.60” x 0.75” pc board with 3-pin output, 0.10” spacing.
CAT# SE-12 $2.40 each

PHOTO DETECTOR

Photonic Detectors Inc # 1541-80A
Miniature photovoltaic cell in a 5mm diameter LED-type package. 0.53Vdcd.
CAT# PD-8 3 for 99¢
50 for 20¢ each

INFRARED SENSORS

INFRARED MOTION DETECTOR MODULE

Mini-passive infrared motion detection module (PIR). Senses changes in infrared heat patterns. 3-pin configuration ideal for use with Arduino / RaspberryPi / Adafruit microcontrollers. Lens diameter, 14mm. Overall length, excluding pins, 19mm.
CAT# PIR-12 $3.75 each

IR RECEIVER MODULE

Simple IR receiver module used to read infrared light value. Can be used to communicate with our IR transmitter module (CAT# SE-28).
Detection angle 60°. Can receive transmissions from a distance of 8 meters. Operating voltage 5 Vdc. 25mm x 15mm.
CAT# ST-1089 $2.40 each

INFRARED SENSOR

RE 200B passive infrared sensor. Two active elements helping compensate for differences in environmental temperature.
Used in alarm systems and automatic switches that respond to human body motion. Hermetically sealed TO5 metal case with 3 leads.
CAT# PIR-200B $1.00 ea. • 10 for 90¢ ea.

PIR SENSOR HC-SR501

Can be used alone or with Arduino or other microcontroller. Adjustable sensitivity and timing. 33 x 24mm pc board. 25mm overall depth.
CAT# PIR-7 $3.25 each

IR OBSTACLE AVOIDANCE SENSOR

Uses IR beam to detect proximity of obstacles. Great for sounding an alarm or changing direction of a robot or self-propelled vehicle. Potentiometer to adjust detection distance (2-40cm). Supply voltage 5 Vdc. 45mm x 16 mm x 9mm.
CAT# ST-1081 $2.75 each

LINE FOLLOWING / REFLECTIVITY SENSOR

Measures the reflectivity of a surface using infrared emitter/ detector pair. Built around the LM393 comparator, it requires only 3 connections, V+, 5VDC, and GND. LED indicator. Can make a robot follow a painted line or count rotations of a motor shaft. 1.64” x 0.42” x 0.40”. Three pin header, 0.1” centers. Operates on 3.3-5Vdc. 20mA @ 5Vdc.
CAT# ST-1140 $2.75 each

IR TRANSMITTER MODULE

IR transmitter module designed for IR communication when paired with IR receiver (CAT# ST-1089). Indicator LED lights when signal voltage change is detected. Operating voltage 5Vdc. Includes 3-pin female jumpers for attachment to header pins. 34mm x 20mm.
CAT# SE-28 $3.40 each

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TEMPERATURE SENSORS

TEMPERATURE SENSOR

National Semi # LM34DZ
Precision Fahrenheit sensor. Voltage is linearly proportional to the temperature. Operates on 5-30Vdc. TO-92 package.
CAT# LM34DZ $3.30 each

TMP36 TEMPERATURE SENSOR

Precision centigrade temperature sensor. It provides a voltage output that is linearly proportional to the Celsius temperature. +125°C temperature range. TO-92 case.
CAT# TMP-36 $2.00 each

DIGITAL TEMPERATURE SENSOR

DS18B20 1-Wire digital temperature sensor. Reports degrees C with 9 to 12-bit precision. -55°C to 125°C (+/-0.5C). Sensor has a unique 64-Bit Serial number etched into it. TO-92 case.
CAT# DS18B20 $1.50 each

TEMPERATURE / HUMIDITY SENSOR

Digital temperature and humidity measurement device with a high-performance 8-bit microcontroller connected. Standard single-bus interface.
CAT# SEN-4 $3.50 each
**LIQUID SENSORS**

**FLUID PRESSURE SENSOR**

Using a 5 Vdc input, the fluid pressure sensor provides a 0.25-4 Vdc output proportional to pressure from 0-5” H2O max. Typical applications include duct air flow, filter pressure monitoring, combustion air flow and gaseous leak detection. Measures 1-5/16” x 17/32” on a pair of 7/8” long slotted mounting wings. Two 3/16” O.D. barbs. 3-pin connector with 3” wire leads for power and output.

CAT # FLS-4  $3.15 each

**LIQUID LEVEL SENSOR**

Float switch closes circuit when float rises to top of switch (end opposite leads). Can be used in opposite direction as well to close circuit when water level drops. 0.96” diameter plastic float and 0.35” threaded bushing with plastic nuts and rubber O-ring. 2.64” overall length. 14” pigtail leads.

CAT # FLW-2  $3.35 each

**FLOAT SWITCH WITH INTEGRATED THERMISTOR**

Gems Sensors. Horizontal liquid level float switch. For sensing rising or falling liquid levels (normally open or normally closed). Hermetically sealed magnet and reed switch for accurate, reliable long-life operation. Polypropylene float, 2.4” long from hinge to end. Four 10” leads, two for switch (red) and two for thermistor (green).

CAT# FLW-1  $3.50 ea. • 10 for $3.00 ea.

**LIQUID FLOW SENSOR**

Measures the rate of liquid flowing through it. Consists of a plastic valve body, flow rotor and hall effect sensor. Can be used with a microcontroller such as Arduino to monitor devices. Operates on 5vdc @ 15mA. Water flow range 0.3-6 L/min. Water pressure <0.8MPa. 4mm I.D. x 6mm O.D. inlets. Overall dimensions 35mm x 35mm x 26mm. 6” 3-wire leads with 3-pin connector.

CAT # FLW-3  $5.00 each

**PROXIMITY SENSOR**

P/N: LJ12A3-4-Z/BX. Inductive-type proximity sensor with NPN, Normally open transistor switch. Output upon detection. Power: 6-36 VDC. Output Current: 300mA. Detection Range: 4mm. Detected material: Iron/Steel alloys. 64mm long x 12mm dia. threaded bushing. Includes hardware. 3-wire, 43” cable.

CAT # PSW-21  $3.75 each

**THROUGH-BEAM PHOTO-ELECTRIC SENSOR PAIR**

SICK Optics WS15-D1130 / WE15-A1130. Photo-electric sender and receiver pair detects the presence of an object when the beam between the two is interrupted. When the beam is broken, the receiver produces a current that can be used to trigger an audio-visual signal or relay-operated device. 5 Meter range. Built-in LED alignment and power indicators. Modules are 38 x 21 x 16.2mm and can be front or side-mounted. Front-mount hardware is included. Operate on 10-30Vdc. Power supply not included. cULus.

CAT # OSU-1130  $11.35 pair

**RED LASER MODULES**

**LASER DIODE**

LiteOn # LTLD505T. 6mm diameter. Gold-plated heat-sink base and leads.

CAT# DLM-6  85¢ each

100 for 40¢ each

**LASER ASSEMBLY W/ PINS**

Mounted on pc board with header pins for use with Arduino and other projects. Can be used as a trip wire for theft detection or for optical effects. 26 x 16 x10mm.

CAT# ST-1172  $2.80 each

**MODULE WITH ADJUSTABLE LENS**

Metal enclosed module. 12mm diameter x 35mm long 5” pigtail leads.

CAT# DLM-8  $4.55 ea. • 10 for $4.00 ea.

**RED X MODULE**

Projects a red X. Visible approximately 10’ in daylight. Metal enclosed module, 12mm diameter x 35mm long. 5” pigtail leads.

CAT# LL-6  $5.00 each

**CD LASER OPTICS AND MECHANISM**

Sony# KSM213CLCM / KSS213CL.

Optical pickup mechanism with CD laser lens assembly. 3.93” x 3.15” metal bracket. New, original condition.

CAT # LA-10  $7.50 each

10 for $6.70 each

**NO HASSLE RETURN POLICY**