LIGHT SENSORS

CdS PHOTOCELLS – PHOTO RESISTORS

Light dependent Cadmium sulfide (CdS) resistors. Plastic coated resistors on ceramic, 0.2-0.25” diameter. Light and dark resistances are approximate.

2MΩ Dark 1K – 60KΩ 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

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. 0.53Vdc.
CAT# PD-8 3 for 99¢

INFRARED SENSORS

IR VACANCY SENSOR SWITCH
RPP Devices# VCSSVVW15-IV (Ivory).
Specs:
• 500W @ 120Vac • 1/8 H.P. @ 120Vac, 60 Hz
• Covers 150° 450 square feet
CAT # PIR-11 $6.50 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 \(\frac{\text{V}}{\text{V}}\) 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

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

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, -55C to 125C (+/-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 diameter 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

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