

# LamaPLC: Sensors

The page below lists sensors compatible with microcontrollers such as Arduino, Raspberry Pi Nano, ESP32, and ESP8266, as they operate at 3.3V/5V signal levels.

The search is easier in the [summarized abbreviation index](#), depending on the type designation.

## Temperature, Humidity, Air-pressure, Gas, Air-quality Sensors and Module



 <p><b>AHT10 Modul</b> Temperature, Humidity + Arduino example code</p>	 <p><b>ENS160 + AHT21</b> Air Quality Sensor - CO, ECO, TVOC, Temp &amp; Humidity Module</p>
 <p><b>AHT20/BMP280 Modul</b> Temperature, Humidity, Air pressure + Arduino example code</p>	 <p><b>MAX31865</b> RTD to Digital Converter - PT100/PT1000 Platine</p>
 <p><b>PTA8C04</b> 4-channel PT100 Modbus Modul with Modbus RTU + Holding Registers Description</p>	 <p><b>NT18B07</b> 7 Kanal RS485 Temperature Sensors with Modbus RTU + Holding Registers Description</p>
 <p><b>DS18B20</b> 1-Wire Digital Thermometer</p>	 <p><b>BMP/BME</b> Bosch Temperature/Humidity/Pressure sensors with I<sup>2</sup>C communication (BME280, BME680, BMP180, BMP280, ...)</p>
 <p><b>DHT</b> Temperature / Humidity sensors with 1-wire / I<sup>2</sup>C communication (DHT11, DHT20, DHT22/AM2302, ...)</p>	 <p><b>DPS</b> Infineon Temperature/Pressure sensors with I<sup>2</sup>C communication (DPS310)</p>
 <p><b>D6T</b> Omron Non-Contact Thermal Sensors with I<sup>2</sup>C communication (D6T-32L, D6T-44L, D6T-8L, D6T-1A, ...)</p>	 <p><b>GM</b> MEMS Gas-sensors (GM-102b, GM-302b, GM-502b, GM-702b, ...)</p>

 <p><b>ENS</b> ScioSense Multi-gas sensors with I<sup>2</sup>C communication (ENS-160)</p>	 <p><b>HTU</b> TE Connectivity temperature/humidity sensors with I<sup>2</sup>C communication (HTU-21)</p>
 <p><b>MQ</b> Winsen Gas-sensors (MQ-2, MQ-3, MQ-4, MQ-5, MQ-6, MQ-7, MQ-8, MQ-9, MQ-131, MQ-135, MQ-137, ...)</p>	 <p><b>SGP</b> SGP Sensirion TVOC/VOC sensors with I<sup>2</sup>C communication (SGP30, SGP40, SGP41, ...)</p>
 <p><b>SHT</b> Sensirion Temperature/humidity sensor with I<sup>2</sup>C communication (SHT20, SHT21, SHT25, SHT30, SHT31, SHT35, SHT40, GY21, ...)</p>	 <p><b>HDC</b> Texas Instruments Temperature/humidity sensors with I<sup>2</sup>C communication (HDC-1080)</p>
 <p><b>CJMCU-6814</b> combined gas sensor module for CO, NO<sub>2</sub>, NH<sub>3</sub> (MICS-6814)</p>	 <p><b>MH-Z19</b> series of NDIR CO<sup>2</sup> sensors (MH-Z19B, MH-Z19C, MH-Z19D, MH-Z19E)</p>
 <p><b>CJMCU-811 CCS811</b> Gas Sensor (VOCs TVOC CO<sub>2</sub>)</p>	 <p><b>Sensirion SCD CO<sup>2</sup> measurement module</b> (SCD30)</p>
 <p><b>Sensirion SCD CO<sup>2</sup> measurement module</b> (SCD40, SCD41)</p>	 <p><b>MLX90614 (GY-906)</b> infrared non-contact thermometer</p>
 <p><b>XGZP68xx</b> Silicon Pressure Sensors / Module (XGZP6810D, XGZP6857D, XGZP6859D, XGZP6887D, XGZP6897D, XGZP6899A)</p>	

## Distance measurement, Gesture Recognition, Optical flow, Motion

 <p><b>HC-SR04</b> Ultrasonic Sensor Module</p>	 <p><b>VL53Lxx</b> STMicroelectronics time-of-flight (ToF) laser-ranging sensors with I<sup>2</sup>C communication (VL53L0X, VL53L1X, VL53L0/1XV2, GY-530, ...)</p>
 <p><b>VL6180X</b> STMicroelectronics Time-of-Flight (ToF) sensor with I<sup>2</sup>C communication</p>	 <p><b>TOFxxx</b> STMicroelectronics Time-of-Flight (ToF) sensors with I<sup>2</sup>C communication (TOF050C, TOF200C, TOF400C, ...)</p>
 <p><b>PAJ</b> Pixart gesture recognition sensors/module with I<sup>2</sup>C communication (PAJ7620U2, GY-PAJ7620)</p>	 <p><b>APDS</b> Avago ALS and proximity detection sensors with I<sup>2</sup>C communication (APDS-9900, APDS-9930, APDS-9960)</p>
 <p><b>M01</b> V0.4 Laser ranging sensor with UART communication</p>	 <p><b>A0221AU/A02YYUW</b> Waterproof Ultrasonic Distance Sensor with UART communication</p>
 <p><b>Waveshare TOF</b> Laser Range Sensor with UART / I<sup>2</sup>C communication</p>	 <p><b>RD-XX</b> Ai-Thinker Radar Module with UART communication (RD-01, RD-03, RD-03D, ...)</p>
 <p><b>RCWL</b> Microwave radar sensor (RCWL-0516)</p>	 <p><b>CJMCU-3901/PMW-3901</b> compact optical flow sensor module/IC by PixArt with SPI communication</p>
 <p><b>PIR sensors</b> (HC-SR501, HC-SR505, AM-312, EKMB/EKMC)</p>	 <p><b>LM393 sensor</b> (FC-03, HC-89) Infrared Speed Sensor Module</p>






## Light, Ambient light, Proximity

 <p><b>CJMCU-3216 / AP-3216</b> integrated digital ambient light and proximity sensor module/IC with I<sup>2</sup>C communication</p>	 <p><b>LM393</b> (KY-026) Flame Sensor (IR) Module</p>
--	---

**Motion detection, Magnetometer, Magnetic angle sensors, 6DOF, Vibration**



 <p><b>MPU-9250/6500</b> 9-axis motion detection module</p>	 <p><b>MPU-6050 (HW-123, GY-521)</b> 6-axis MotionTracking device</p>
 <p><b>Magnetic angle sensors</b> (AS5047P, AS5600, MT6701, MT6816, MT6835, TLE5012B)</p>	 <p><b>GY-511</b> 6DOF sensor module</p>
 <p><b>Vibration sensors</b> (GXFM0459, LDTM-028K)</p>	

**Signal Converters, Shift Registers, I/O\_Expanders**



 <p><b>PCA9306</b> I<sup>2</sup>C Voltage Level Translator</p>	 <p><b>CJMCU-164</b> SN74HC164D 8-bit Shift Register Module</p>
 <p><b>TTL to RS485 Module</b> MAX485</p>	 <p><b>TCA9548A</b> (HW617); Low-Voltage 8-Channel I<sup>2</sup>C Switch Module</p>
 <p><b>MCP23017 / MCP23S17</b> (CJMCU-2317) 16-Bit I/O Expander with Serial Interface I<sup>2</sup>C / SPI</p>	 <p><b>SC16IS750 / SC16IS752</b> One or two serial (UART) ports from microcontroller via I<sup>2</sup>C or SPI communication (CJMCU-750, CJMCU-752)</p>
 <p><b>Texas Instruments ADCs</b> Delta-sigma multi-channel Analog Converters with SPI communication (ADS111x, ADS12xx)</p>	 <p><b>TXS0108E (HW-0108)</b> 8-channel, bidirectional 5V-3.3V logic level converter</p>

 <p><b>PCF857x</b> I/O Expander chip/modul with I<sup>2</sup>C communication (PCF8574, PCF8574A, PCF8575)</p>	
--	--

### Amplifiers, DC-DC converters, PWM signal converters

 <p><b>XY_MOS</b> MOS FET Drive Module 400W Support PWM Controller</p>	 <p><b>CJMCU-8221</b> Analog Devices Precision instrumentation amplifier module</p>
---	--




### Weight sensors

 <p><b>YR-3180</b> YR-3180 - Weight sensor module with UART or Modbus communication + Modbus map</p>	 <p><b>HX711</b> 24-bit analog-to-digital converter (ADC)</p>
--	--

### Energy meters (EM)

 <p><b>Eastron SDM 630</b> 3-phase Energy Meter with Modbus communication + Modbus map</p>	 <p><b>Eastron SDM 230</b> 1-phase Energy Meter with Modbus communication + Modbus map</p>
---	---

### Energy harvesting (EH)

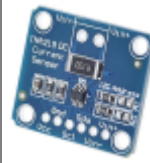
 <p><b>LTC-3588</b> Nanopower energy harvesting power supply IC</p>	 <p><b>BQ25570 / CJMCU-2557</b> Texas Instruments nano-power management IC and module</p>
 <p><b>LTC-3108-1</b> Ultra Low Voltage Boost Converter Power Manager Breakout Board</p>	

## Energy, power, current, voltage, XDCP



**INA-Moduls**

current/voltage/power monitor with I<sup>2</sup>C communication  
INA219 INA226 INA228 INA237 INA238 INA260  
INA3221



**CJMCU-219/INA-219**

breakout board/IC with I<sup>2</sup>C communication



**Allegro ACS758**

Hall-effect linear current sensors  
(CJMCU-758)



**Digitales Potentiometer Board Modul**

Renesas X9C series  
(X9C102, X9C103, X9C104, X9C503)

## Magnetic, Induction, Angle



**AS5600**

Magnetic Induction Angle Measurement Sensor Module

## Healthcare sensoric



**MAX30100/MAX30102**

Heart Rate Click Sensor Module



**CJMCU-6701**

Biosensor for measuring Galvanic Skin Response (GSR) with SPI communication

## Audio, Microphone



**MAX4466/MAX9814**

Low-noise Microphone Preamplifiers



**LM393**

(HW-484, KY-037, KY-038) High-Sensitivity Sound Detection Module

From:  
<http://lamaplc.com/> - **lamaPLC**

Permanent link:  
<http://lamaplc.com/doku.php?id=sensor:start&rev=1778855014>

Last update: **2026/05/15 16:23**

