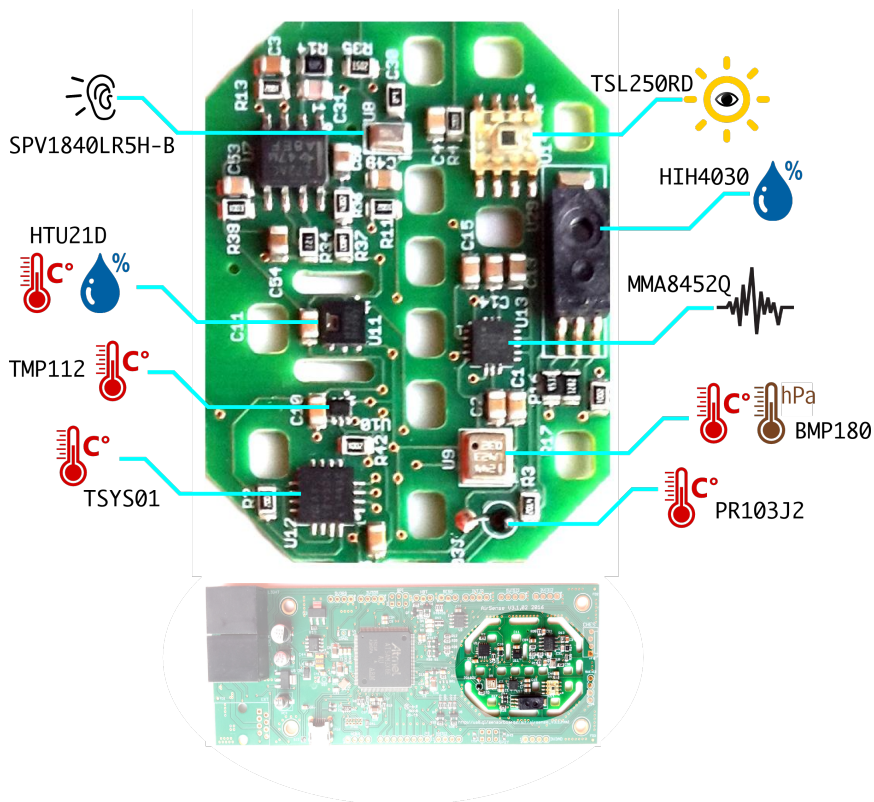


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## Waggle Sensors

### Airsense



Size: 55x145x15mm

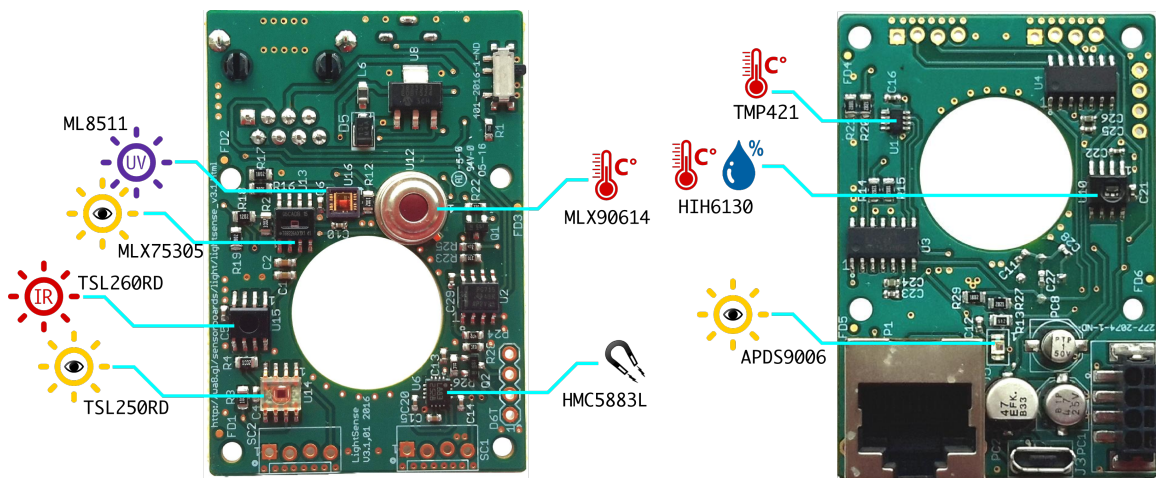
Interface: USB-Serial, I2C

CPU: Atmel SAM3X8E ARM Cortex-M3 CPU

| Part Name | Measurement | Range         | Accuracy  | Datasheet                 |
|-----------|-------------|---------------|-----------|---------------------------|
| TMP112    | Temperature | -40 to +125°C | ±1°C      | <a href="#">Datasheet</a> |
| HTU21D    | Temperature | -40 to +125°C | ±1°C peak | <a href="#">Datasheet</a> |

|               |   |                                    |                              |                           |
|---------------|---|------------------------------------|------------------------------|---------------------------|
|               | Relative Humidity                           | 0 to 100 %RH                       | ±2%RH                        |                           |
| BMP180        | Atmospheric Pressure                        | 300 to 1100hPa                     | ±0.02hPa                     | <a href="#">Datasheet</a> |
|               | Temperature                                 | -40 to +85 °C                      | ±1.0°C                       |                           |
| PR103J2       | Temperature                                 | -55 to +80 °C                      | ±0.05°C                      | <a href="#">Datasheet</a> |
| TSL251RD      | Light Intensity, $\lambda_p = 640\text{nm}$ | 0 to 124 $\mu\text{W}/\text{cm}^2$ | 16 $\mu\text{W}/\text{cm}^2$ | <a href="#">Datasheet</a> |
| MMA8452Q      | 3 axis acceleration                         | ±8 g                               | ±20 mg                       | <a href="#">Datasheet</a> |
| SPV1840LR5H-B | Instantaneous Sound Sample                  | Acoustic Overload point 121 dB SPL | -38 dBV/Pa                   | <a href="#">Datasheet</a> |
| TSYS01        | Temperature                                 | -40°C to +125 °C                   | 0.5 °C                       | <a href="#">Datasheet</a> |

## Lightsense



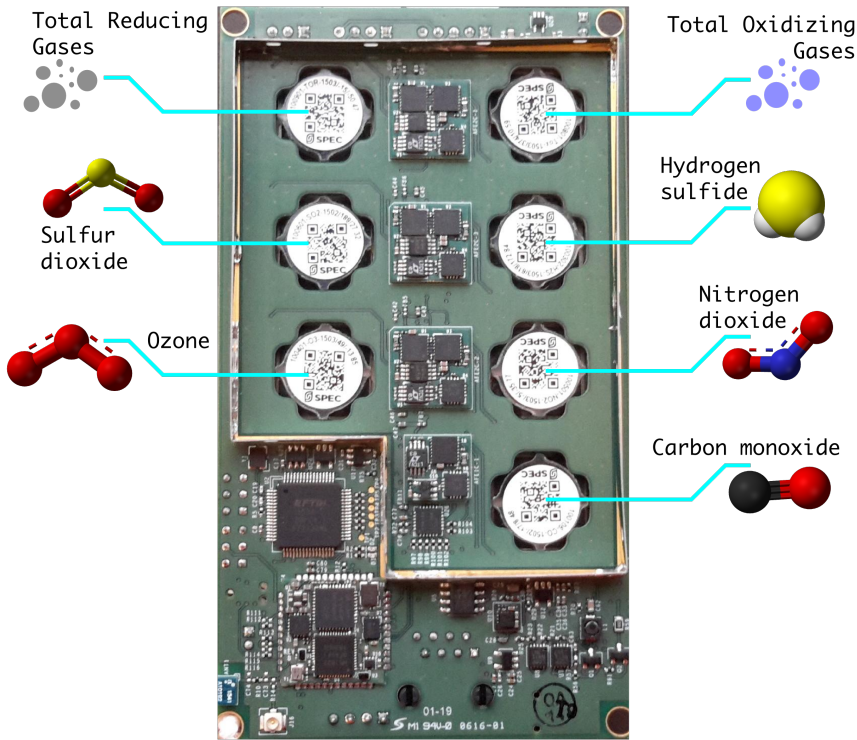
Size: 40x57x15mm

Interface: I2C

CPU: None.

| Part Name     | Measurement                                 | Range                              | Accuracy                      | Datasheet                 |
|---------------|---|------------------------------------|-------------------------------|---------------------------|
| HMC5883L      | 3 axis magnetic field intensity             | ±8 gauss                           | ±0.002 gauss                  | <a href="#">Datasheet</a> |
| HIH6130       | Temperature                                 | -25 to +85°C                       | ±1.0°C                        | <a href="#">Datasheet</a> |
|               | Relative Humidity                           | 0 to 100 %RH                       | ±0.05 %RH                     |                           |
| APDS-9006-020 | Light Intensity, $\lambda_p = 500\text{nm}$ | 0 to 1000 LUX                      | ±0.68 %                       | <a href="#">Datasheet</a> |
| TSL261RD      | Light Intensity, $\lambda_p = 940\text{nm}$ | 0 to 132 $\mu\text{W}/\text{cm}^2$ | ±15 $\mu\text{W}/\text{cm}^2$ | <a href="#">Datasheet</a> |
| TSL251RD      | Light Intensity, $\lambda_p = 640\text{nm}$ | 0 to 124 $\mu\text{W}/\text{cm}^2$ | ±16 $\mu\text{W}/\text{cm}^2$ | <a href="#">Datasheet</a> |
| MLX75305      | Light Intensity, $\lambda_p = 700\text{nm}$ | 0 to 160 $\mu\text{W}/\text{cm}^2$ | ±15 $\mu\text{W}/\text{cm}^2$ | <a href="#">Datasheet</a> |
| ML8511        | Light Intensity, $\lambda_p = 365\text{nm}$ | 0 to 15mW/cm <sup>2</sup>          | ±1%                           | <a href="#">Datasheet</a> |
| TMP421        | Temperature                                 | -55 to +127°C                      | ±1.25°C                       | <a href="#">Datasheet</a> |
| D6T-44L-06    | Temperature                                 | 0 to 50°C                          | ±1.5°C                        | <a href="#">Datasheet</a> |
| MLX90614      | Temperature                                 | -40 to +85 C                       | ±0.5°C                        | <a href="#">Datasheet</a> |

# Chemsense



Size: 65x130x15mm

Interface: USB-Serial, UART

CPU: Intel Microprocessor

| Part Name            | Measurement                  | Range           | Accuracy       | Datasheet                 |
|----------------------|------------------------------|-----------------|----------------|---------------------------|
| SHT25                | Temperature                  | -40 to +125°C   | ±0.2°C         | <a href="#">Datasheet</a> |
|                      | Humidity                     | 0 to 100%RH     | ±1.8%RH        |                           |
| LPS25H               | Temperature                  | -30 to +105°C   | ±2°C           | <a href="#">Datasheet</a> |
|                      | Atmospheric Pressure         | 260 to 1260 hPa | ±0.2hPa        |                           |
| Sulfur Dioxide       | SO2 Concentration            | 0 to 20 ppm     | ±3% of reading | <a href="#">Datasheet</a> |
| Hydrogen Sulfide     | H2S Concentration            | 0 to 50 ppm     | ±3% of reading | <a href="#">Datasheet</a> |
| Ozone                | O3 Concentration             | 0 to 20 ppm     | ±3% of reading | <a href="#">Datasheet</a> |
| Nitrous Oxide        | NO2 Concentration            | 0 to 20 ppm     | ±3% of reading | <a href="#">Datasheet</a> |
| Carbon Monoxide      | CO Concentration             | 0 to 1,000 ppm  | ±2% of reading | <a href="#">Datasheet</a> |
| BMI160               | 3 axis acceleration          | ±16g            | 300µg/Hz       | <a href="#">Datasheet</a> |
|                      | 3 axis orientation           | 2000°/s         | 0.07°/s rms    |                           |
| Total Reducing Gases | Reducing Gases Concentration | 0 to 20 ppm     | ±3% of reading | ...                       |

Total Oxidizing Gases      Oxidizing Gases Concentration      0 to 20 ppm      ±3% of reading      ...

## OPC-N2



Size: 65x75x60mm

Interface: USB Storage, SPI

| Part Name | Measurement                                    | Range | Accuracy | Datasheet                 |
|-----------|--|-------|----------|---------------------------|
| OPC-N2    | PM1 PM2.5 and PM10 in $\mu\text{g}/\text{m}^3$ |       |          | <a href="#">Datasheet</a> |