



v4, December 2018

# SKS61 Datasheet

## High resolution Carbon Dioxide NDIR Sensor

-picture coming soon-

SKS61 gives the users an unprecedented level of weight to performance ratio. This document is the preliminary specifications of the high resolution CO<sub>2</sub> concentration sensing module.

| Parameters                  | Specifications  |
|-----------------------------|---|
| Measured Gas                | Carbon Dioxide  |
| Operating Principle         | Non-dispersive infrared (NDIR)  |
| Measurement Range           | 0-1000ppm   |
| Repeatability               | 0.1ppm peak to peak at constant temperature and constant flow.  |
| Resolution                  | 0.5 ppm at 2sec sampling interval<br>0.2 ppm at 10sec sampling interval<br>90 ppb at 1min sampling interval |
| Response Time               | Limited by sampling interval  |
| Operating Temperature Range | -40 - +85°C   |
| Warm-up time                | 45 minutes to full spec   |
| Supply Voltage              | 12 - 15V <sub>DC</sub>  |
| Supply Current              | Approx. 6A at start-up (mirror heating)<br>Approx. 350mA post start-up at room temperature                  |
| Communication               | Sparvio SSP   |
| Size                        | Approx. 85mm x 137mm  |
| Weight                      | 460gm with pump   |

### Sparvio background

The Sparvio system provides a modular, plug-and-play solution for measuring various quantities for UAVs, other environmental studies, lab experiments and education. The system is designed to start immediate measurements without any further integration.

SKS61 is designed and manufactured in Sweden by Sparv Embedded AB.