

uSense

Stand-Alone Environmental Module

Fast detection and monitoring of environmental and ambient parameters

With the stand-alone environmental module uSense from fionec, different environmental and ambient parameters such as pressure, temperature and humidity, but also rotation and acceleration, as well as magnetic field and IAQ (Index for Air Quality) can be easily measured and monitored. The module is therefore ideal for monitoring sensitive devices, machines and working environments, e.g. in the measuring room, laboratory or in production. Measured values can be collected flexibly at any desired location. Via LAN or optionally WLAN, fast browser-based access and intuitive operation of the module is possible via any internet-capable end devices such as PCs, mobile phones and tablets.

Live-Display

The measured data are transferred to the registered receivers and are graphically available via a live display. With colour-coded, individually configurable limit ranges, critical values and outliers can be quickly detected visually.

Warning of critical values

As soon as the sensors measure values that are outside the set limits, the module warns online and additionally via an LED ring in the front of the housing. Corresponding colour changes indicate the critical values. Warnings can also be sent directly by e-mail to configurable recipients when the limits are exceeded.

Reporting and analysis

The measurements are automatically saved and can be displayed directly in the application and can easily be exported. The free DataViewer Basic software from fionec can be used for evaluation and analysis. In addition, import into programmes such as Excel, Origin, Matlab is also possible



Specifications

Features and benefits:








- ✓ Live measurement of environmental and ambient parameters
- ✓ Stand-alone solution
- ✓ Fast access and intuitive operation via LAN, optionally WLAN
- ✓ Live display of measured values
- ✓ Coloured display of critical ranges
- ✓ Individual configuration of limits for all sensor values
- ✓ Sensor warning of critical measured values by changing LED colour
- ✓ Warnings are sent directly by e-mail
- ✓ Easy storage of measured values
- ✓ Import and analysis of data in e.g. Excel, Origin, Matlab

Language

- ✓ German
- ✓ English

Dimension

- ✓ Size (w x h x d):
116 mm x 44 mm x 126 mm
- ✓ Weight: 0.6 kg

Parameter	Measuring range	Resolution	Optional
 Rotation*	± 2000 °/s	±0.5 (initial) ±0.005 %/°C	
 Acceleration*	± 16 g	±0.5 (initial) ±0.005 %/°C	
 Temperature**	-20°C bis 120°C	±0.5 °C	✓
 Pressure	300 hPa up to 1250 hPa	±0.016 hPa	✓
 Humidity	0 % rH up to 100 % rH	±3% rH	✓
 Magnetic field	x, y-axis: ± 1300 µT z-axis: ± 2500 µT	0.3 µT	✓
 IAQ***	0-500	1	✓

* Or alternatively externally

** The temperature is monitored via external sensors that can be connected via the GPIO port

*** IAQ (Index for Air Quality) as well as CO² and b-VOC equivalent (breath-Volatile Organic Compounds in exhaled air)



-  Upper limit range
-  Upper warning range
-  Rated range
-  Lower warning range
-  Lower limit range