-nvitems

Envitems LPC - An OEM Module for PM2.5/PM10 Particle Measurements

Product Datasheet [PRELIMINARY]



- Compact Laser Particle Counter (LPC) for indicative air quality measurements
- Measures PM2.5 and PM10
- Other particle sizes available on request
- Integrated brushless pump and temperature/humidity sensor as an option
- RS-232 connection
- Single +5 VDC power supply
- 1 year factory calibration

Envitems LPC is one of the world's smallest particle counters. Its operational principle is based on the scattering of laser light caused by passing particles, which are measured optically and analyzed with digital signal prosessing (DSP). The particle counter is primarily intended for indicative PM2.5/PM10 measurements.

The measurements can be read via a RS-232 interface. As compact and easy to integrate, Envitems LPC can be used as part of other systems.

Envitems LPC is available with a combined temperature/humidity sensor and an integrated pump. An isokinetic sampling nozzle is part of standard configuration.

The light-weight particle counter weighs only 195 grams with a pump, and even less without it.

For more information, please contact our sales.

envitems.com/go/oem



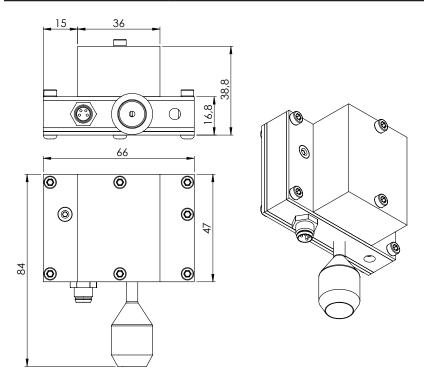


Technical specifications

| Data protocol | Custom ASCII (115200 bps) |
|--------------------------|--------------------------------------|
| Serial data interface | RS-232 |
| Power and data connector | 4-pin M8 connector with 150 mm cable |
| Sample connectors | 3.2 mm barbed fitting |
| Operating voltage | 5 VDC ± 10 % |
| Power consumption | Typ. 300 mW in operation |
| Operating environment | -30 — 50 °C, RH 15 — 95 % |
| Protection class | IP54 |
| Enclosure materials | Anodized aluminium, stainless steel |
| Dimensions W x H x D | 66 x 56 x 45 mm (option 001) |
| Weight | 195 g (option 001) |
| Warranty | 1 year |

Measurement specifications

| Particle range | 0.3 — 20 μm (spherical equivalent) |
|---------------------|------------------------------------|
| Response time | <60 s |
| Sampling interval | 1 s |
| Sample flow rate | 0.3 SLM (integrated vacuum pump) |
| Count rate | 10 000 particles/s |
| Units | μg/m³ |
| Factory calibration | 1 year |



Ordering information M0032-B LPC Module

Options

-001 Integrated pump

-005 T/H sensor

-010 8 - 30 VDC input

Important Information and Disclaimer: All product specifications are subject to change without notice to improve accuracy, function or design or otherwise. As applications of use are outside our control, the information provided is given without legal responsibility. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

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