

LED/PD for Gas Sensing

New LED/PD optical components based on InAsSb or AlInSb narrow band gap heterostructure (0,1 - 0,6 eV) allows detection of different target gases in the mid infra-red spectrum. LED/PD based gas sensors provides the unique solution to detect a range of different gases with very low power consumption making them particularly suitable for portable equipment and remote monitoring.



Key attributes & features

- Low power consumption, factor of 100 to 1000 versus traditional thermal source and pyrodetector
- Better sensitivity, allowing to reduce the size of the optical path length of the sensing device
- Simple assembly, no optical filter is required allowing to simplify the final assembly
- Fast response time, allowing to get more than 10 reading per sec



Applications

- Monitoring / control and safety (toxicity, explosimetry, fire detection):
 - Buildings (offices, schools classrooms, hotels, commercial offices and kitchen)
 - Domestics
 - Industries
 - Automotive
 - ...



Customer benefits

- Low power consumption, potentially compatible with battery or self powered operating sensors providing:
 - Cost benefits in installation and operation
 - Flexibility of room arrangement
 - Simplifying retrofitting of sensors
 - Environmentally friendly
- Reliability and robustness, particularly suitable in Building and Industrials applications
- Fast response time allowing fast detection in safety application