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Integrated, Modular, Multisensing, Mid- and Near- IR sensing platform



M3NIR - Deliverable report

D2.2 - Report on the specifications of the M3NIR sensors



Disclaimer / Acknowledgment



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About M3NIR

M3NIR plans to boost photonics-based sensing technology in terms of performance, reduction of footprint, energy consumption and costs. The value chain to be implemented by the M3NIR project includes the optimization of the manufacturing approaches of mid-infrared photonic devices, the development of relevant electronics and the high-level integration of other components like microfluidics for the realization of high-performance sensors. With the extra focus towards miniaturized configuration, robustness, maintenance-free operation, low power consumption and cost-effective sensing, M3NIR aims to create a modular, highly adaptable and efficient multi-sensing platform, which will be validated in the domains of environmental monitoring and healthcare. The project makes use of novel schemes for component integration and packaging, enabling both scientific and industrial breakthroughs.

M3NIR consortium members





























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SEN	Sensitive, only for members of the consortium	X	
SEN	(including the Commission Services)		



Publishable summary

Deliverable "D2.2: Report on the specifications of the M3NIR sensors" is part of work package "WP2: Specifications & overall architecture of the sensory systems and application use cases". In general, all essential specifications of the M3NIR devices and use cases are generated. In addition, the co-designing of the modules is drafted. Deliverable D2.2 encompasses three major tasks:

- 1) Generation of the specifications based on the targeted applications of the final M3NIR sensors.
- 2) Description of the mid-IR fingerprint regions of the targeted analytes to be detected.
- 3) Report on the design of validation activities.