

FOCUS MARKETS



ENABLING MARKETS

Environmental monitoring · Smart farming
Packaging · Pharmaceutical · Predictive maintenance
Forensics sciences · Oil & Gas · Waste management
Textile industry · Surveillance & Security



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aimen
TECHNOLOGY CENTRE



Abraia

AIR OPTIC™
REAL TIME GAS ANALYZERS

imec

IRIS
TECHNOLOGY GROUP

scm
woodworking technology

Royo®

photon focus

RUSSULA

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DES LANDES
HEAVY
PLATES**

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European Photonics
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MONOM
Industry
Lovers

JOTIS

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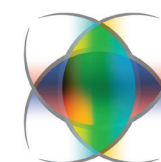
PHOTONICS²¹

PHOTONICS PUBLIC PRIVATE PARTNERSHIP

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www.photonics21.org

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**THE FUTURE OF
PHOTONICS-BASED
PROCESS OPTIMISATION**



CHARACTERISTICS

Broadband

Working spectral range of 0.4 – 5.0 μm

Multimodal

VIS SWIR MWIR



VIS - Surface and volume geometry definition, spectrally-resolved colorimetric assessment.

Smart

State-of-the art machine learning technology for big-data handling and reliable online feedbacks in the manufacturing processes.

Cost-effective

Camera cores with high spectral specificity and coverage suitable for volume production and enforcement of cost-effectiveness throughout the whole value chain.

VIS SWIR MWIR



SWIR - hyperspectral estimation of mechanical properties, multi-wavelength high temperature thermography.

VIS SWIR MWIR



MWIR - chemical composition estimation.

Process Integrated

Optimization at all production levels via orchestration of smart monitoring systems.



ABOUT MULTIPLE

MULTIPLE will bring together snapshot mosaic filters, organic-electronics-based sensors, and state-of-the-art machine learning to deliver breakthrough and cost-effective snapshot hyperspectral imaging and spectrometric solutions covering a broad spectral range and suited to actual industrial monitoring and control needs.

MULTIPLE multimodal monitoring systems will be IoT native, exploiting open source cloud, big data, and deep learning technology. A fast-orchestrated deployment of data-driven AI-based models will foster production optimization.

