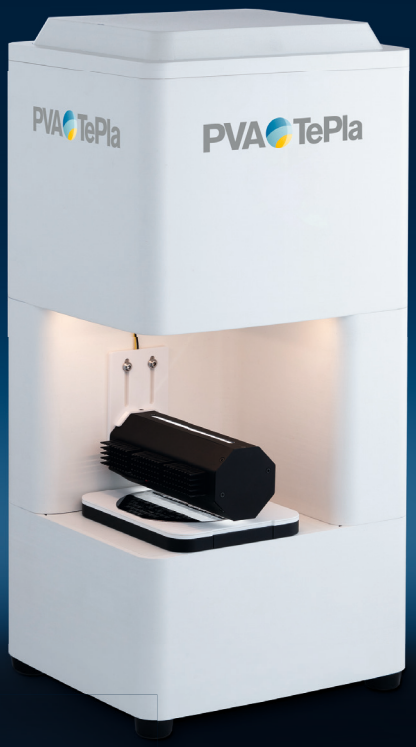
VEpioneer® CORE

PRODUCT OVERVIEW

COMPREHENDING THE INVISIBLE



Fast. Non-destructive. Comprehensive. VEpioneer® CORE is the world's smallest fully integrated one-button Hyperspectral Vision system for macroscopic inspection – small enough to take anywhere. It captures surface properties, inspects thin films and identifies deviations from production specifications.

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HYPERSPECTRAL VISION TO GO

WE DON´T GUESS.
WE SEE.

Even the smallest deviation from specification means scrapped parts or costly rework. Yet most inspection methods are slow, complex, or even destructive. **VEpioneer® CORE** changes that: full 100 % hyperspectral inspection – now small enough to take anywhere.

Smallest footprint on the market
Fits on any bench, moves with your work. The true „take-away" Hyperspectral Vision system.

One button operation. Full surface insight
Fully automated inspection from measurement to result – no complex setup, no prior expertise required.

Fully non-destructive process
Optical spectroscopy leaves samples completely intact – ideal for production-critical parts.

Fast measurement
A scan of 50 × 100 mm in less then 10 seconds.

Wide range of Layer thickness
Precisely inspects ultra-thin to thick layers across a wide range of materials and substrates.

Compatible with virtually any material
Metals, glass, polymers, semiconductors, ceramics – the VEpioneer® CORE handles them all.

Comprehensive analysis
100 % sample information in just one run.



TECHNICAL PARAMETERS

Every detail matters. The VEpioneer® CORE is engineered for precision, speed, and versatility.

SPECIFICATIONS	
Measurement Mode	Reflectance
Measurement Time	< 10 s (typical)
Wavelength Range	VNIR 450–900 nm
Spectral Resolution	1.34 nm
Field of View (FOV)	100 mm ²
Spatial Resolution	100 µm ¹
Max. Sample Size	up to 50 x 100 mm, max. height 10 mm ²
Lighting	VEluminise® – LED broadband excitation
Software	VEsolve® PRO
Connectivity	RJ45 (Ethernet)
ENVIRONMENT	
Power Requirements	230 VAC (115 V optional), 50 Hz, 80 W
System Dimensions	230 x 200 x 500 mm (L × W × H)
System Weight	12 kg
Certifications	CE, RoHS, UKCA
Operating Conditions	+ 5 °C to + 40 °C (non-condensing)
SUBSTRATES & LAYERS	
Substrates	Metals, glass, polymers, semiconductors (Si, SiC), ceramics, and many more
Layers	Oxides, nitrides, carbides, polymers, and many more
Layer Thickness Range	1 nm – 500 µm (material dependent)
Surface Information	■ Cleanliness ■ Contaminations ■ Defects ■ Surface states ■ Custom target parameters

¹ High-resolution scan-modes available. | ² Further customisation available.



WANT TO FIND OUT MORE?
CONTACT US FOR INFORMATION!

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Disclaimer
The technical data, illustrations, and descriptions contained in this document are non-binding. They are intended solely for general information purposes and do not constitute a legally binding offer. We reserve the right to make technical changes in the interest of progress, as well as the right to correct errors. The exclusively applicable specifications are those valid at the time of order placement.

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