



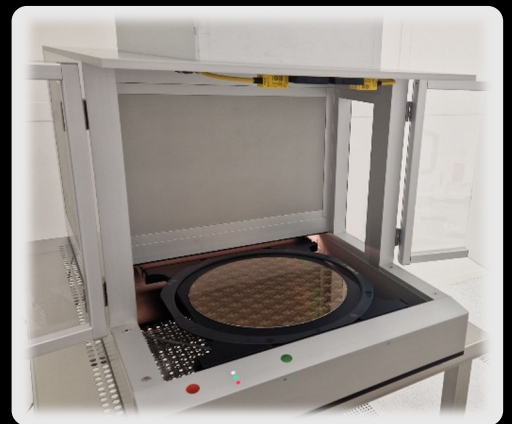
VEPIONEER® CR

Hyperspectral Vision System

FAST, COMPREHENSIVE AND NON-DESTRUCTIVE

VEpioneer® CR is the world's first fully integrated, one-button, bench-top Hyperspectral Vision system designed for macro wafer inspection in cleanroom environments (ISO 3). It efficiently captures surface properties, detects thin films, and identifies deviations from production specifications.

- **FAST**
Measurement time: 20 seconds
- **COMPREHENSIVE**
One run: 100% sample information
- **NON-DESTRUCTIVE**
Unique combination of optical spectroscopy and imaging



INSIGHTS FROM INSPECTION

VEpioneer® CR boosts your product and sample knowledge by orders of magnitude with spatially resolved recognition of:

- **LAYER THICKNESS**
1 nm - 500 µm, depending on layer material
- **QUALITY CRITERIA**
Defects, contaminations, processing status, roughness of surfaces and interfaces
- **SAMPLE PROPERTIES**
Chemical, electrical, optical

CHECK OUT
MORE



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VEPIONEER® CR

Hyperspectral Vision System

INSPECTED MATERIALS

VEpioneer® CR is designed for simple and fast area measurement of surfaces and thin films on various substrates:

- **SUBSTRATES**

Semiconductors (Si, SiC, ...), metals, polymers, ceramics, glass, ...

- **LAYERS**

Oxides, nitrides, carbides, polymers, ...

SPECIFICATIONS

Imaging technique	Pushbroom scanning mode
cleanroom capability	ISO class 3, including laminar flow FFU
Measurement mode	Reflectance fluorescence optional
Measurement time (typical)	20 s (@framerate 50 Hz)
Wavelength range	VNIR: 400-1000 nm SWIR 1: 900 – 1700 nm
Spectral bands	VNIR: 448 SWIR: 224
Spectral resolution	VNIR: 1.34 nm SWIR: 3.5 nm
Field of view (FOV)	300 mm 200 mm optional
Spatial resolution	VNIR: 300 µm SWIR: 470 µm field of view configurable 200 – 300 mm further scan modes with high-resolution available
Lighting	VELuminise unit: tuneable halogen broadband source for homogeneous light field broadband LED with spectral range 400 – 900 nm or UV-LED excitation optional
Dimensions	1052 x 568 x 592 mm (L x W x H)
Sample size	360 x 360 mm maximum sample height max. 10 mm, further sample sizes optional
Sample stage	Linear, 500 mm travel range, sample holder adapted to customer specifications
Reference	Built-in PTFE protected aluminium optional
Operating conditions	+5 ... +45 °C (non-condensing)
System weight	90 kg
System certification	CE, RoHS, UKCA
Power requirements	Rated voltage: 230 VAC (115 V optional) Rated frequency: 50 - 60 Hz Rated power: 170 W
Connectivity	RJ45 (ethernet)
Compute unit	Laptop or PC with DIVE VEsolve® Pro software

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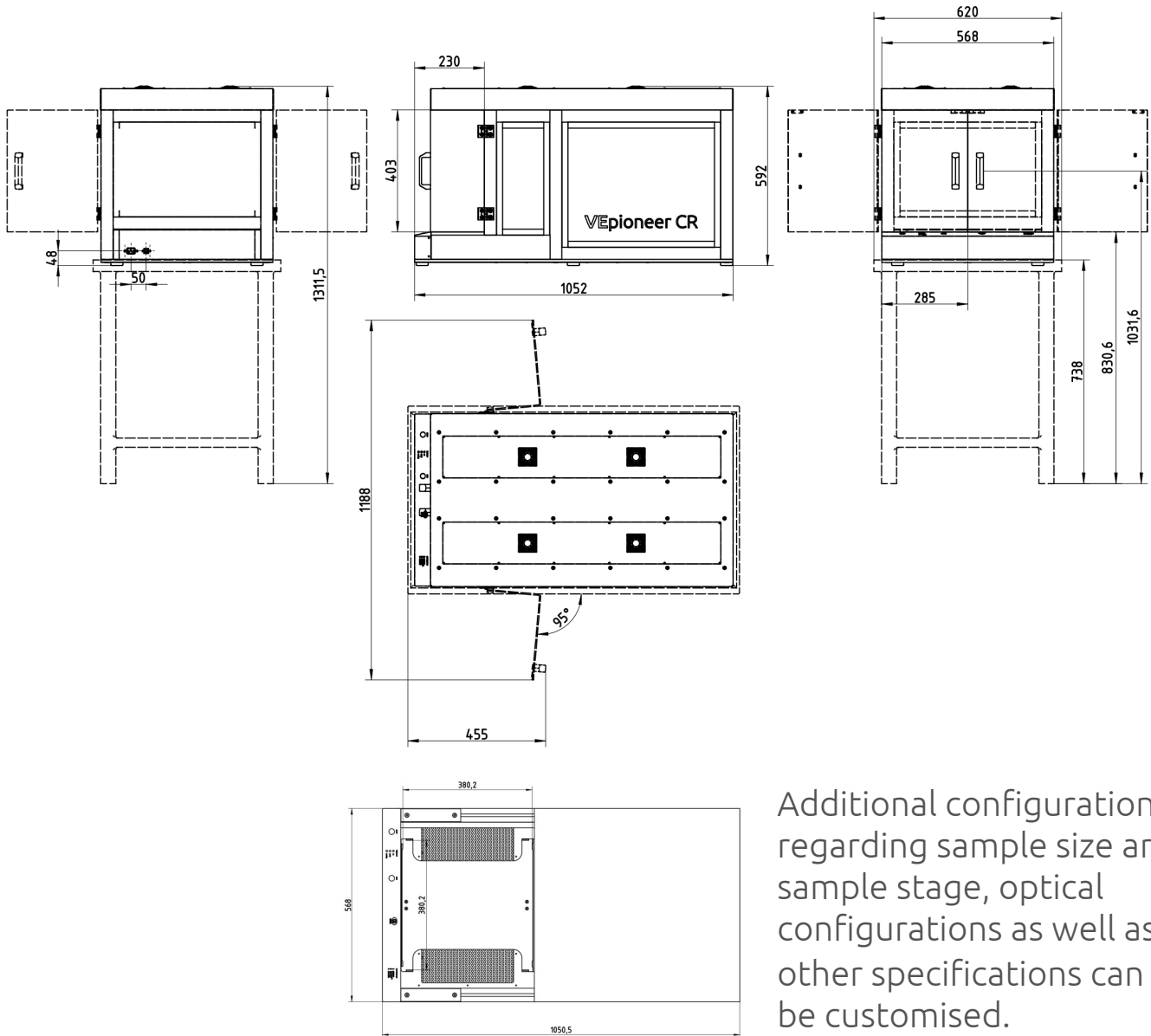
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DIMENSIONS



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