



MDPspot

Single spot Mono- and Multi-crystalline minority carrier lifetime measurement device

for contactless/destruction-free lifetime measurements according to semi standard SEMI PV9-1110

Si | compound semiconductors | oxides | wide bandgap materials | perovskites | epitaxial layers

[CdTe | InP | ZnS | SiC | GaAs | GaN | Ge]



Features of MDPspot

Sensitivity: highest sensitivity for visualization of so far invisible defects and investigations of epitaxial layers

Range of lifetimes: 20 ns to several ms

Measurement capability: from as-cut wafers to fully processed samples

Reliability: compact bench top instrument for higher reliability and uptime > 99%

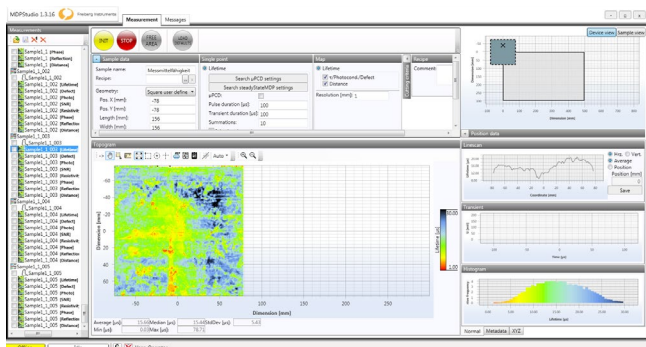
Repeatability: > 99.5%

Flexibility: suitable for both wafers and bricks with easy to use height adjustment

Accessibility: IP based system allows remote operation and technical support from anywhere in the world.

Facts

- › different recipes for different wafer classes
- › monitoring of material, process quality and stability
- › single wafer investigation
- › user-friendly and modern operating software (MDPStudio)



Technical specifications

Sample size	above 50 × 50 mm ² up to 12" or 210 × 210 mm ²
Range of lifetimes	20 ns to several ms
Resistivity	0.2 – >10 ³ Ohm cm
Conduction type	p, n
Measureable properties	carrier lifetime, resistivity (optional)
Excitation	select up to two different wavelengths from 355 nm up to 1480 nm. 980 nm (default)
Power requirements	110 – 230 V AC, 3 A
Dimensions	354 × 352 × 517 mm
Weight	ca. 13 kg
Certification	manufactured under ISO 9001 guidelines, CE conform

Made in Germany

Last revision: 18th July, 2018



Headquarters

Freiberg Instruments GmbH

Delfter Str. 6
D-09599 Freiberg, Germany

t +49 3731 419 54 0
sales@freiberginstruments.com
www.freiberginstruments.com



Strategic partner



Erfolg durch Leistung