



MDPlinescan

Mono- and Multi-crystalline minority carrier lifetime measurement device

Flexible OEM unit for lifetime measurements from as-grown wafers to process control of wafers with different layers 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 MDPlinescan

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

Measurement speed: under 1s for a 156 mm linescan suitable for typical production speed

Range of lifetimes: 20 ns to several ms

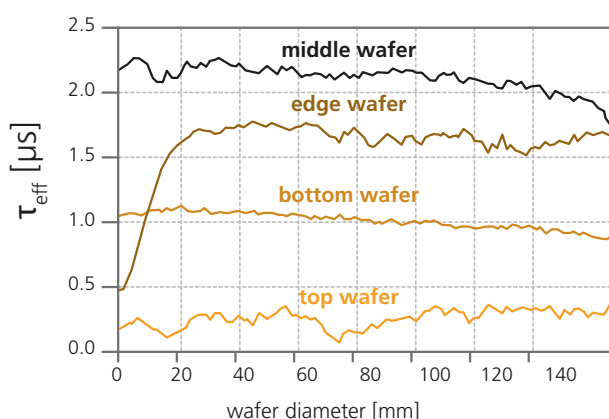
Measurement capability: from as-cut wafers to fully processed samples

Reliability: flexible OEM unit for higher reliability and uptime > 99%

Repeatability: > 99.5%

Facts

- › recipe based measurements
- › 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
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	100 × 85 × 142 mm
Weight	ca. 2 kg
Certification	manufactured under ISO 9001 guidelines, CE conform

Made in
Germany

Last revision: March 22, 2022



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

