

YieldStar S-250D



Order Codes

9428.999.46120

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DESCRIPTION

The YieldStar S-250D is a standalone metrology tool which allows measurement of diffraction based overlay (DBO) and diffraction based focus (DBF) techniques and CD ADI CD.

KEY FEATURES AND BENEFITS

The YieldStar S-250D enables and supports the following applications:

- BaseLiner MMO
- On-product overlay measurements for monitoring and APC (in conjunction with 16 x 16 um targets in-die (uDBO) or 30x60 um targets in scribe area)
- On-product focus measurements for monitoring and APC (in conjunction with 16 x 16 um targets in-die)
- On-product CD ADI measurement is an option for inline measurement

Increased Sampling

YieldStar S-250D provides increased sampling compared to the S-200C, because of its larger field of view.

Process Robustness

Diffraction based techniques are, by design, more robust against process variations, especially at the edge of the wafer. This gives very precise on-product overlay measurements and allows to calculate more accurate corrections to be applied on the scanners.

The S-250D has 30% better TMU compared to the S-200C which supports more corrections and better on-product overlay and focus performance of the scanner.

Device Matching

The correlation of DBO measurements to real device overlay is better than the value at tighter on-product overlay requirements.

TECHNICAL SPECIFICATIONS

Overlay (uDBO, 10x10 μm^2 targets)

- TMU
- MAM

Focus (DBF)

- Dynamic precision
- MAM time

Productivity

- Throughput (4 wafers, 1000 uDBO points)
- Wafer overhead