

# Optical switch integrated pattern defect detection system for semiconductor manufacturing



mol 1x16 19" 2 HU

**FiberSwitch**  
Light Switching for Optical Systems

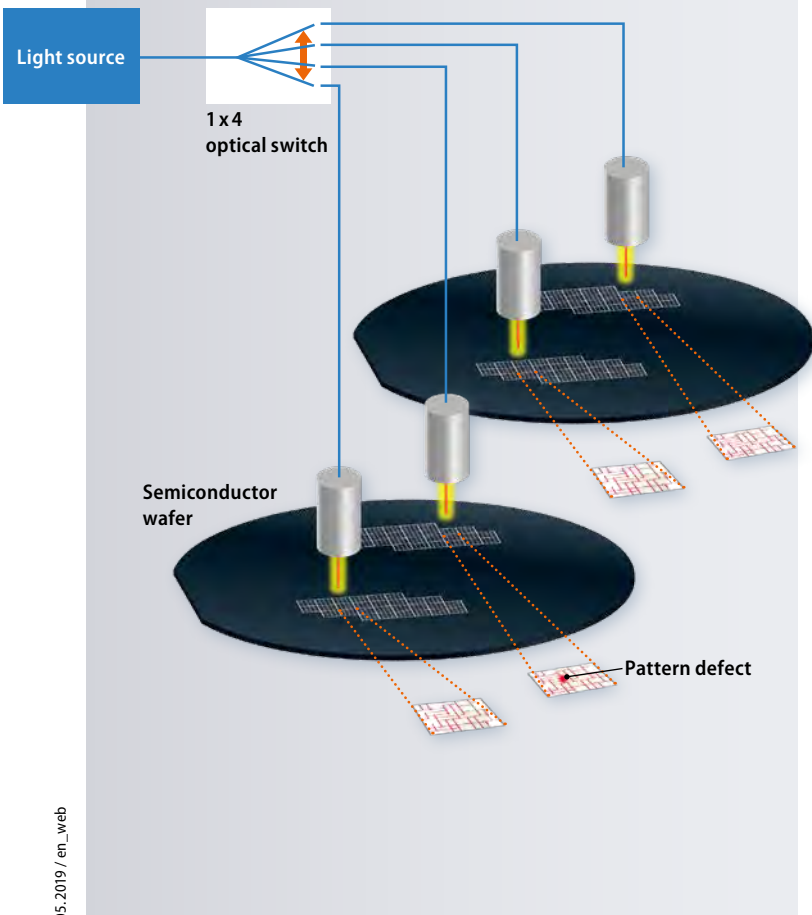


mol 2x4

## Detecting pattern defects in semiconductor wafers with integrated 2xN optical switch

In the semiconductor manufacturing process, optics is applied to find pattern defects. A pattern defect can be detected by comparing the pattern images of each die (integrated circuit). By integrating LEONI 2xN optical switches can be downsized and the throughput can be enhanced. LEONI optical switches will be applicable to some enhanced configurations, such as a multiple light source system. LEONI supplies various types of 1xN and 2xN single- & multi-mode switches, i.e. LargeCore fibers up to 800 μm, PM, UV-VIS, VIS-IR and broadband.

As an OEM service partner we can also easily integrate the switch into the final measuring system.



Specifications	
Number of channels N	1x2, 1x4, 1x8, 1x12, 1x16, 2x4, 2x8 (2 ports are switched synchronously) → Other channel counts on request
Operating wavelength [nm]	Depending only on fiber characteristics
Switching frequency [s <sup>-1</sup> ]	≤ 50

**LEONI**