

R&D
Custom

NEW

High resolution(2M-Pixel) Reflective LCoS, Spatial Light Modulator

Santec's reflective LCoS-SLM (Liquid Crystal on Silicon, Spatial Light Modulator) is based on a liquid crystal drive technology for HDTV-compliant large screen projectors.

The LCOS-SLM has excellent features of high resolution 2M pixels and high gradient control 256 (8-bit).

Custom designs are available upon customer's request.

- High gradient option -
 - 10-bit (1,024)
 - 12-bit (4,096)
 - 14-bit (8,192)
 - 16-bit (16,384)
- High phase modulation option -
 - Phase shift $>2\pi$ @1550nm
- High reflection option -
 - Reflectance: $>90\%$ @1550nm



Product image

Features

- ▶ High resolution 2M pixel
- ▶ High gradient level 256
- ▶ Spatial phase / intensity modulation
- ▶ Phase shift $>\pi$ @1550nm
- ▶ 8.0 μ m small pixel size
- ▶ High efficiency, high aperture

Applications

- ▶ Digital-drive spatial grating array
- ▶ Adaptive optics / Wavefront compensation
- ▶ Light pulse & laser beam corrections
- ▶ Optical manipulation / Optical tweezers
- ▶ Holographic optical memory
- ▶ Optical inter-connections

Specification

- ▶ LC type : Reflective LCOS (VA mode)
- ▶ Panel size : 17.4 \times 9.7 mm (0.73" diagonal)
- ▶ Resolution : (H)1920 \times (V) 1080 (HDTV)
- ▶ Pixel size : 8.0 μ m
- ▶ Gap distance : 0.5 μ m
- ▶ Phase shift : $>\pi$ @ 1550nm
- ▶ Gradient level : 256(8-bit)
- ▶ Reflectance : 60%
- ▶ Aperture : $>87\%$
- ▶ Response time : 350ms (typ.)
- ▶ Frame rate at max. : 60Hz

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