

# Liquid Crystal Based Spatial Light Modulator High Power LCOS model / SLM-300

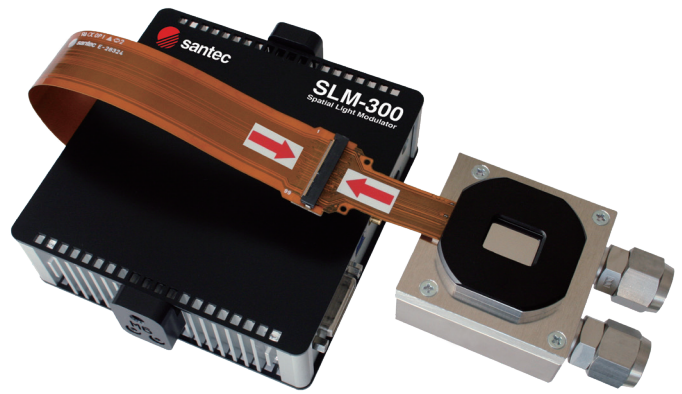
Santec's spatial light modulator (SLM) is based on reflective liquid crystal on silicon (LCOS) micro-display technology. The Santec SLM-300 high-power LCOS based spatial light modulator holds the world record for high-power durability up to CW 200 Watts. The SLM-300 has 100 times higher power durability when compared with Santec's conventional SLM product, the SLM-200.

### Features

- ▶ High Power-durable LCOS based SLM
- ▶ High Phase Resolution 10-bit (1024) Gray Level
- ▶ Ultra Low Phase Noise  $\sim 0.002\pi$ rad

### Applications

- ▶ Laser Processing
- ▶ 3D-Printing
- ▶ IC Trimming

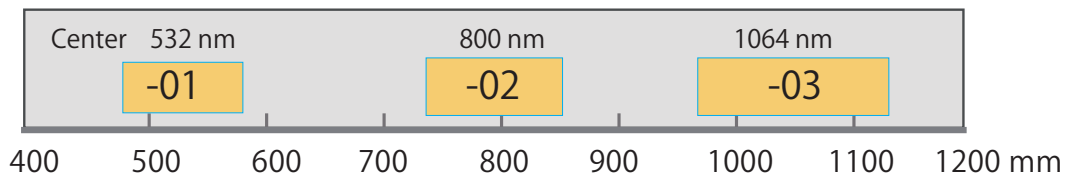


## ■ Specifications

Item	min	max	Units	Notes
Operating wavelength range	532, 800, 1064		nm	
Panel size	(H)15.36 x (V)9.60		mm	Active area
Pixel resolution	(H)1920 x (V)1200		pixel	
Pixel size / pitch	7.8 / 8.0		$\mu$ m	
Panel reflectivity	Typ. >80		%	Depending on specified wavelength range
Aperture ratio	95		%	
Gray level	10 (1024)		bit	
Phase depth	$2\pi$	-	rad.	
Phase stability	Typ. <0.002		r/rad.	
Response time	Typ. 200		ms	
Signal format	DVI* / USB3.0		-	*10-bit using RGB 8-bit, 3 colors
Operating temperature range	15	35	degC	
Storage temperature	0	40	degC	
Optical power handling	-	200 <sup>1)</sup>	W/cm <sup>2</sup>	CW
Dimensions	122 x 122 x 38.3		mm	
Control software	GUI software for Windows		-	
Water flow	1 ~ 2		L/min	15 ~ 25 degC
Water inlet and outlet	Water hose		-	Dia. inner 10mm, outer 12mm

1) The value is not guaranteed. Please refer santec SLM technical sheet in one instance for judgement of useable light power.

■ Wavelength option



■ Ordering Code

**SLM-300-01-0002-XX**

Wavelength option  
01: 532 nm, 02: 800 nm, 03: 1064 nm

[www.santec.com](http://www.santec.com) E-Mail : [sales@santec.com](mailto:sales@santec.com)

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**SANTEC CORPORATION**  
5823 Ohkusa-Nenjozaka, Komaki, Aichi 485-0802, Japan Tel. +81-568-79-3536 Fax +81-568-79-1718

**SANTEC U.S.A. CORPORATION**  
433 Hackensack Ave., Hackensack, NJ 07601, U.S.A. Toll Free +1-800-726-8321(santec-1) Tel. +1-201-488-5505 Fax +1-201-488-7702

**SANTEC EUROPE LIMITED**  
Grand Union Studios, 332 Ladbrooke Grove, London W10 5AD Tel. +44-20-3176-1550

**SANTEC (SHANGHAI) Co., Ltd.**  
11F Room E, Hua Du Bldg., No.838 Zhangyang Road, Pudong District, Shanghai 200122 China Tel: +86-21-58361261, +86-21-58361262 Fax: +86-21-58361263