

NEW Liquid Crystal Based Spatial Light Modulator
Ultra Violet and Full-HD model / SLM-250

Santec introduces an Ultra Violet (UV) durable spatial light modulator (SLM-250). This product is a world's first for two-dimensional SLM, extending their use into the UV band. The UV hardened SLM-250 has 42 times UV durability when compared to standard SLM devices. A power density up to $10\text{mW}/\text{cm}^2$ is sustainable using a novel liquid crystal and dielectric mirror design. The SLM-250 follows the popular first generation, HD-LCOS, SLM-150 from Santec model. The SLM-150 is suitable for various scientific and industrial applications, including beam shaping, wavefront correction and optical manipulations.

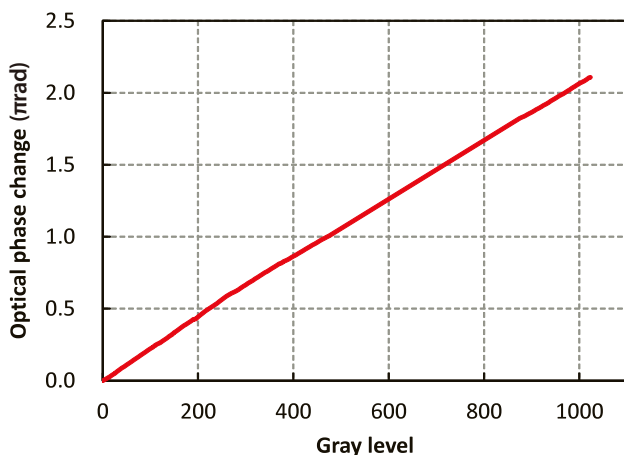
**UV Hardened
 Full-HD LCOS**



Applications

- ▶ Beam steering
- ▶ Wavefront correction
- ▶ Pulse/Beam shaping
- ▶ Diffractive optics
- ▶ Optical manipulation
- ▶ Programmable phase pattern

Measurement



Features

- ▶ WUXGA (1920 x 1200) and Full-HD (1920 x 1080) available
- ▶ Low stress design and easy mount LCOS head
- ▶ Frame rate, x2 (120Hz)
- ▶ Memory function
- ▶ Triggers-input & output

■ Specifications

Item	min	max	Units	Notes
Wavelength range	365	550	nm	
AR coat range	365	550	nm	
AR coat reflectance	-	0.7	%	Angle of incidence = 0 degree
Panel size	(H)15.42 x (V)9.66		mm	Active area
Pixel resolution	(H)1920 x (V)1200		pixel	
Pixel size / pitch	7.8 / 8.0		μm	
Panel reflectivity	Typ. >70		%	Depending on specified wavelength range
Aperture ratio	95		%	
Gray level	10 (1024)		bit	
DVI video frame rate	60 or 120		Hz	
LCOS drive frequency	1200		Hz	
Phase depth	2π	-	rad.	
Phase fluctuation	Typ. <0.003π		rad.	
Response time	Typ. 50		ms	
Signal format	DVI / USB3.0		-	10-bit using RGB 8-bit, 3 colors
Operating temp. range	15	35	degC	
Storage temperature	10	40	degC	
Optical power handling *	Typ. 40		MW/cm ²	Peak power @355nm, Pulse laser,pulse width 260psec, repetition rate 100Hz
	-	10.0	mW/cm ²	@365nm, 24H/day continuous operation
Dimensions	122 x 122 x 38.3		mm	
Control software	GUI software for Windows		-	

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

■ Ordering Code

SLM-250

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