



LUNA Phase Only LCOS SLM

The LUNA phase only Spatial Light Modulator models are based on reflective LCOS microdisplays with 1920 x 1080 pixel resolution and 4.5 μm pixel pitch.

The LUNA Phase Only Spatial Light Modulator is our most compact SLM platform for integration into small sized or even portable solutions.

The driver ASIC is embedded in the LCOS microdisplay itself. This saves board space which enables a very compact driver and makes integration more convenient. The standard driver box has a size of only 84.4 x 47 x 28.8 mm. The display can even accept video data input via a 4-lane MIPI DSI. This brings phase only Spatial Light Modulator technology to a new level of potential for industrial implementations.

We offer different phase display versions which are optimized for the use at different wavelength ranges. Currently we offer a VIS version (420 – 650 nm), a NIR version (680 – 1100 nm) and a version for the telecommunication waveband around 1550 nm (1400 – 1700 nm).

The LUNA-VIS-111 version is even capable of color field sequential (CFS) phase operation with ≥ 32 linearly distributed phase values for each color (R, G, B).

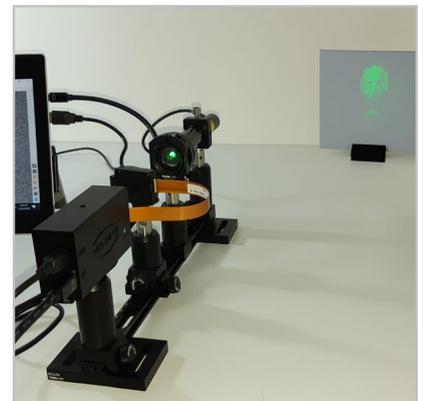
A basic requirement to achieve the faster response time necessary for CFS, is a higher display temperature of 55 °C and adapted voltage settings, saved in the corresponding configuration file. We highly recommend to use a Thermal Management System (TMS) in order to control the display temperature in CFS mode.

You can find more information on the devices, information on software and reference publications at <https://holoeeye.com/products/spatial-light-modulators/luna-phase-only/>



Key Features:

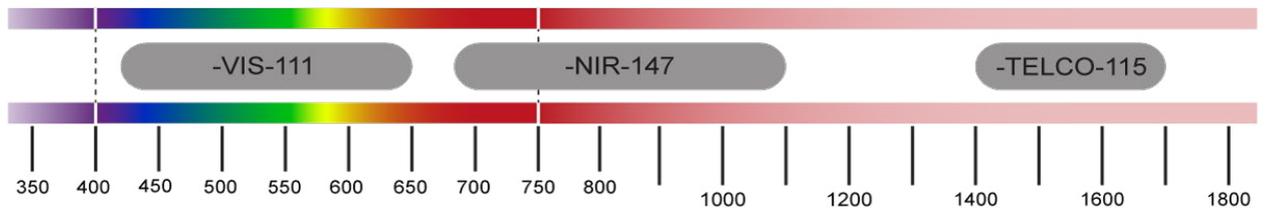
- Easy plug and play
- Very compact design
- Small pixel / high diffraction angles
- Display with Integrated ASIC
- Superior software



Why Use LUNA SLM's from Laser Components USA?

- High quality performance
- Product spectral ranges between 420 nm to 1700 nm
- Customization options available
- Exceptional technical support (through HOLOEYE Germany)

Specification Table



Device	λ Range	Maximum Phase	Average Refl.
LUNA-VIS-111	420 – 650 nm	2.4π @ 635 nm	64%
LUNA-NIR-147	680 – 1100 nm	2.3π @ 1064 nm	65%
LUNA-TELCO-115	1400 – 1700 nm	2.3π @ 1550 nm	70%