

PLUTO-2.1 Phase Only LCOS SLM

The PLUTO-2.1 phase modulator models are based on reflective LCOS microdisplays with 1920 x 1080 pixel resolution and 8.0 μm pixel pitch.

The PLUTO-2.1 LCOS Spatial Light Modulator is the all-rounder within HOLOEYE's SLM product range. It is the best qualified and diversified SLM platform with many versions optimized for specific requirements, including high reflectivity versions featuring a dielectric mirror for high power applications. The PLUTO hardware is already implemented in different industrial applications.

The PLUTO-2.1 series offers versions optimized for the use at different wavelength ranges from 350 nm up to 2500 nm and versions optimized for different applications (e.g. high power versions).

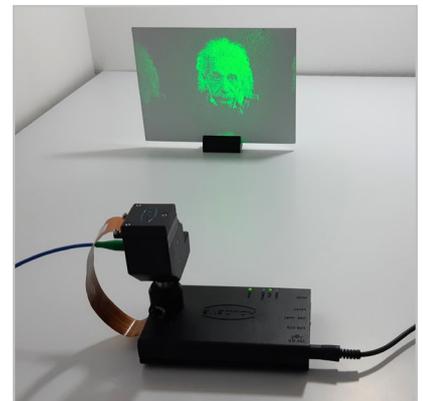
The PLUTO-2.1 driver uses an HDMI interface for addressing phase functions and an USB connection to communicate with the driver (to changing the voltage vs. gray level distribution (gamma control) and dynamic range (voltage across the LC cell) in order to calibrate the SLM for different wavelengths). Besides this the driver features a trigger sync output to synchronize the device with external devices.

The driver unit for the PLUTO-2.1 also features a dual-core ARM Cortex-A9 processor with on-chip memory. This enables you to program additional functionality directly processed on the SLM device. The dual-core system operates on an embedded Linux SMP operating system and includes a library allowing you to fully control the display and driver board.

You can find more information on the devices, information on software and reference publications at <https://holoeeye.com/products/spatial-light-modulators/pluto-2-1-lcos-phase-only-refl/>.

Key Features:

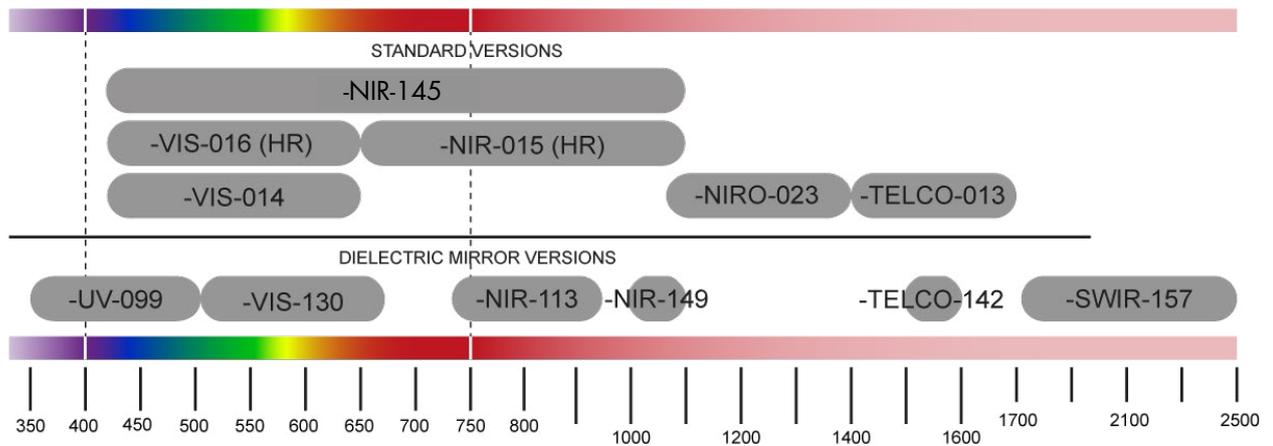
- Easy plug and play
- Superior reflectivity over spectral bands
- Broadband version available
- Versions for high power lasers
- High phase retardation versions available
- High flexibility (driver can be used with different display versions)
- Superior software



Why Use PLUTO-2.1 SLM's from Laser Components USA?

- High quality performance
- One of the most referenced SLM in scientific papers
- Product spectral ranges between 350 nm to 2500 nm
- Customization options available
- Exceptional technical support (through HOLOEYE Germany)

Specification Table



Device	λ Range	Maximum Phase	Average Refl.	Recommendation
PLUTO-2.1-UV-099	350 – 420 nm	2.3 π @ 405 nm	90%	UV Resistance
PLUTO-2.1-VIS-014	420 – 650 nm	3.0 π @ 650 nm	65%	Fast response time
PLUTO-2.1-VIS-016	420 – 650 nm	5.2 π @ 633 nm	67%	High phase stability
PLUTO-2.1-NIR-145	420 – 1064 nm	2.2 π @ 1064 nm	82%	Broadband version
PLUTO-2.1-VIS-130	500 – 670 nm	2.5 π @ 633 nm	94%	High power laser
PLUTO-2.1-NIR-015	650 – 1100 nm	3.6 π @ 1064 nm	69%	High phase stability
PLUTO-2.1-NIR-113	730 – 940 nm	2.5 π @ 800 nm	95%	High power laser
PLUTO-2.1-NIR-149	1000 – 1100 nm	2.9 π @ 1064 nm	93%	High power laser
PLUTO-2.1-NIRO-023	1100 – 1400 nm	4.2 π @ 1300 nm	74%	O-Band version
PLUTO-2.1-TELCO-013	1400 – 1700 nm	3.9 π @ 1550 nm	80%	C-Band version
PLUTO-2.1-TELCO-142	1500 – 1600 nm	3.4 π @ 1550 nm	93%	C-Band, high reflectivity
PLUTO-2.1-SWIR-157	1700 – 2500 nm	2.0 π @ 2500 nm	90%	Short-wave infrared