

Diffractive Pulse Shaper

- Measures and compresses pulses in seconds
- Uses the MIIPS[®] auto-calibration and auto-compression technology
- Complete pulse shaping solution (includes computer, spectrometer and nonlinear optical detection)
- Enhanced power handling due to cylindrical-optics-based design
- Reflective and diffractive shaping modes



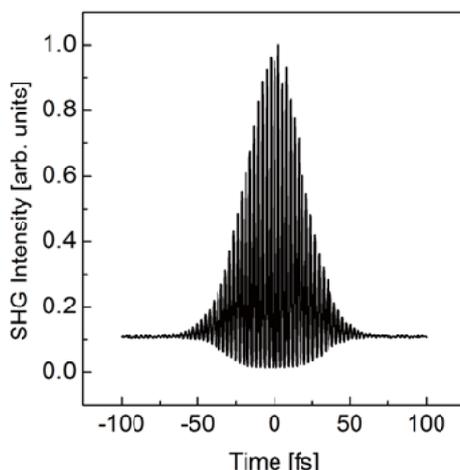
Eliminate Manual Tweaking

With Push-Button Pulse Characterization

Includes the MIIPS[®] technology:

MIIPS[®] is an automated procedure for measurement and compression of optical pulses. It uses a calibrated pulse shaper to introduce a set of reference phase functions and monitors their effect on spectrally resolved nonlinear response such as second harmonic generation.

Mathematical analysis of the recorded spectra provides a direct measurement of high-order pulse dispersion. The measured spectral phase can be compensated by the pulse shaper to compress the laser pulses to their transform limit at the target, without manual tweaking.



Push-button interferometric autocorrelation

System Specifications

SLM type	2D array, LCOS
Pixel pitch	20 μm
Number of pixels	792
Number of independent control channels [^]	~400
Operating wavelength range [*]	400 - 1550 nm
Spectral window ^{&}	up to 200 nm
Maximum input average power ^{&}	1-2 W
Maximum input pulse energy ^{&}	1-2 mJ
Recommended $1/e^2$ beam diameter	7-8 mm
Input polarization	linear, horizontal
Dimensions L x W x H	451 x 213 x 210 mm (17.75 x 8.375 x 8.25 in.)

Shaping of spectral phase and amplitude[#], independent of the laser repetition rate.

[^] Depends on the input beam size.

^{*} Several SLM types are available across the specified range; see the Table below for details.

[&] Depends on the back-mirror type and the center wavelength; customized to fit the laser source.

[#] Diffractive shaping mode is used to achieve the amplitude control.

Table. Back-mirror types and operating ranges for Hamamatsu LCOS-SLM X10468.

